



Tooth Tutor

A simplified oral health curriculum
for Pre-K to Grade 12

Second Edition
2011



Tooth Tutor

A simplified Oral Health Curriculum for Grades Pre-K to Grade 12

Second edition, 2011

First edition, 1996



DOH 160-083 September 2011

Division of Community and Family Health
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Introduction

Welcome to the 2011 edition of *Tooth Tutor*!

Tooth Tutor is the result of a collaborative effort between the Washington State Department of Health and the Office of the Superintendent of Public Instruction (OSPI). The intent is to bring simple and evidence-based information to the classroom to promote oral health and enhance learning.

The first edition of *Tooth Tutor* was released in 1996. The 2011 edition provides the most recent evidence on oral health topics formatted to meet OSPI standards.

Improving the oral health, and consequently general health, of children is essential to help them succeed in life. School districts are important partners because they have a clear interest in promoting student learning and are in direct contact with most children—*Tooth Tutor* was developed especially for the school environment to support the work of teachers, school nurses, and student instructors.

Impact of Oral Health on School Children

Students with chronic dental pain are unable to focus and become easily distracted in school. They are likely to score lower than those who have no pain. Studies show that students miss valuable school days due to painful dental problems. Students from low-income families missed nearly 12 times as many days of school because of dental disease compared to students from families with higher incomes.¹

When students' acute dental problems are treated and pain eliminated, eating, learning, attendance, and performance at school improve. The good news is that most dental disease is preventable with simple and effective measures that can be applied at home and school. *Tooth Tutor* talks about such measures. If students and their families learn how to maintain a healthy mouth and prevent dental diseases, students will be healthier, happier, and consequently more productive at school. Good grades and good health go together.

How to use *Tooth Tutor*

The 2011 *Tooth Tutor* is designed to be user-friendly. This edition is composed of:

- Ten units that describe oral health practices to maintain a healthy mouth
- Class activities tailored to different grades (Pre-K to 12)
- Handouts or master copies for each class activity
- Accompanying letters to parents/caregivers (English and Spanish) to make them aware of what the student learned in class, and how to support their children's good oral health habits
- Extra background information for educators to support a successful teaching experience

The unit topics are generally interchangeable between grades. Educators are encouraged to adapt the units and related class activities to their student level.

¹ Oral Health and Learning: When Children's Health Suffers, So Does Their Ability to Learn (2nd ed.) © 2003, by National Maternal and Child Oral Health Resource Center, Georgetown University. www.mchoralhealth.org/PDFs/learningfactsheet.pdf

How to Use the Lesson Plans

1. Study the teacher background information for the unit you are planning to teach.
2. Review the lesson plan and prepare any materials needed, including: copies of master copies, experiment materials, and books or songs.
3. Begin each lesson by reviewing the previous oral health lesson.
4. Review any master copies that accompany the unit.
5. Review the Useful Links and Additional Resources for Teachers section for additional materials and ideas for activities.
6. Master copies can be made into overhead transparencies, copied for individual handouts, and/or referred to while teaching lesson.
7. Master copies are meant to be supplemental to each lesson both for teachers and students.
8. A letter for parents and/or caregivers accompanies each unit. Remember to copy one for each student to take home after teaching part or all of a unit.
9. Plan to talk to students about the information you read in the teacher background information and master copies.
10. Adapt and use lessons from other grade levels or units as appropriate.

An online form will be available in the near future to collect educators' feedback to further improve *Tooth Tutor*. Your expertise will help guide future updates to *Tooth Tutor*.

Pointers for Student Instructors

Students from higher grades are sometimes involved in teaching younger students. Here are some hints for class preparation:

Plan ahead

Your lessons will run most smoothly if you know where you are going and how you want to get there. Each lesson has an objective or set of objectives to assist you in planning, but you will need to plan the sequence of lessons, and prepare for each of the activities. If you share your plan with your students, they will have a great deal more understanding of the concepts being taught.

Effective instruction

Elementary school students learn best when they are actively involved. Let them handle the materials, perform the experiments, and discuss what they are experiencing. Make sure to actively involve students in each lesson by calling on everyone, making frequent eye contact with all students, and giving everyone time to handle materials.

Cultural differences

It is important to be aware of cultural differences between students or between students and yourself. In some cultures the use of garlic to ease the pain of a toothache is a perfectly normal action. Keep an open mind and value the contributions of students.

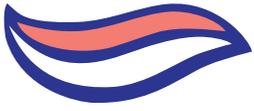
Keep the language simple

Some of your students may have limited understanding of English. This may be a problem if you do not speak their language(s). Repeat instructions and information if you think students may not understand. Remember that young students do not have an extensive vocabulary.

Variety is the spice of life

To keep your lessons active and to involve as many students as possible, plan a variety of activities. Some students are shy when discussing things but are great artists. Others may not be able to write very well but are excellent when working with others. Let everyone succeed by employing different techniques. When students make an effort to perform, let them know you recognize their efforts.

Teacher Background Information



Unit 1

Importance of a Healthy Mouth

A healthy mouth is essential to physical, social, emotional, and intellectual development. The mouth contains teeth, gums, oral tissues, and the tongue.

- Teeth help us eat, speak, sing, smile, have a balanced shape to the face, and consequently have good self-esteem.
- Healthy gums and bone help hold our teeth in place.
- Oral tissues include cheeks, lips, and palate, which are essential for chewing and speaking.
- The tongue helps us speak and taste foods.

In 2000, the U.S. Surgeon General highlighted the importance of a healthy mouth.² This report brought to light the silent epidemic of dental diseases around the country. It also presented scientific evidence linking gum disease to other chronic diseases, such as diabetes, heart disease, and respiratory disease.

Oral health affects children and adults both physically and psychologically. It influences how they grow, enjoy life, look, speak, chew, taste food, and socialize. Poor oral health brings unnecessary pain and suffering to children and adults in all settings – home, school, work, and social activities.

Dental diseases common in children and adolescents

Tooth decay is the most common chronic disease on the planet.³ For children and adolescents, tooth decay is five times more common than asthma and seven times more common than hay fever.² Tooth decay is completely preventable. Yet, when tooth decay is present and ignored, it is often painful and costly to treat.

Washington State 2010 data show that about 40 percent of Head Start/ECEAP preschoolers and kindergartners and 58 percent of third graders have had some tooth decay experience. These numbers are significantly higher than the national objectives of 30 percent and 49 percent respectively.⁴ Students from racial and ethnic minorities had more dental disease and poorer access to care than white students.⁵

Gum disease (gingivitis or gum bleeding) is a common infection among most children and adolescents. Gingivitis causes gum tissue to swell, turn red, and bleed easily. If left untreated, it can eventually advance to more serious forms of gum disease. It is preventable with a regular routine of brushing and flossing and the absence of smoking. The good news is that tooth decay and gum disease are preventable at home and school through measures such as healthy nutrition, good oral hygiene, fluoride, sealants, not smoking, and leading a healthy lifestyle.

² National Institutes of Health. Oral Health in America: A Report of the Surgeon General, 2000. <http://silk.nih.gov/public/hck1ocv.@www.surgeon.fullrpt.pdf>

³ FDI and World Health Organization. Global Oral Health Atlas, 2009. www.oralhealthatlas.org/Home.html

⁴ Healthy People 2020. www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32

⁵ Washington State Department of Health Smile Survey, 2010. <http://doh.wa.gov/cfh/oralhealth/datapubs/default.htm>

What to do to prevent dental diseases

- Eat healthy foods: avoid sugar and starchy foods between meals.
- Drink water that contains fluoride at recommended levels.
- Brush your teeth twice a day with fluoride toothpaste.
- Floss in between teeth once a day (with the help of a parent until age 8).
- It is important to have dental sealants applied to the first and second permanent molars around ages 6 and 12.
- Avoid smoking and illicit drugs, which can lead to tooth decay, gum disease, oral cancer, and other dental problems.
- Use mouth guards and helmets when practicing sports to prevent dental injury.

TOOTH TRIVIA

**Teeth are as unique as fingerprints!
Even identical twins have different
dental patterns.**

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia





Unit 2

Tooth Shapes and Functions

Teeth are important for the proper digestion of nutrients we get from food. Teeth have different shapes and specific functions in the chewing process. The teeth in front, called incisors, are for biting food into smaller pieces. The side canine and premolar teeth are sharp and pointed for tearing and cutting foods. The molar teeth in the back are for grinding and mashing food into smaller pieces before swallowing.

Humans have two sets of teeth: 20 primary (baby) teeth and 32 permanent (adult) teeth.

Baby teeth

The life of baby teeth:

- Baby teeth erupt (come in) between 4 and 30 months of age, and are lost naturally between 6 and 12 years of age.
- The first baby teeth to loosen are the top front teeth (central incisors) around age 6.
- The last baby teeth to loosen are the back molars by age 12.
- Between ages 6 and 12, children have a mix of baby and permanent teeth (mixed dentition).

Baby teeth are as important as permanent teeth because they:

- Help young children to chew and speak correctly.
- Hold space in the jaw for the coming permanent teeth that are still developing under the gums. If baby teeth are extracted (removed) too early, the permanent teeth below may come in crooked.

Permanent teeth

- Children will have between 28 and 32 permanent teeth.
- The first permanent teeth to come in are the front central incisors around age 6, followed by the permanent back molars behind the baby molars. Be aware of the arrival of the first permanent molar (also called a six-year molar) because it has many groves and pits, which can make it prone to decay. It is important to brush regularly the back of the mouth and get sealants on the first permanent molars around ages 6–7. Sealants will help protect the new permanent molars from tooth decay.
- The second permanent molars will come in at age 12, and need sealants as well.
- The last permanent teeth to erupt are the third molars (wisdom teeth). Recent evidence shows that wisdom teeth do not need to be routinely removed, except for very specific reasons.⁶

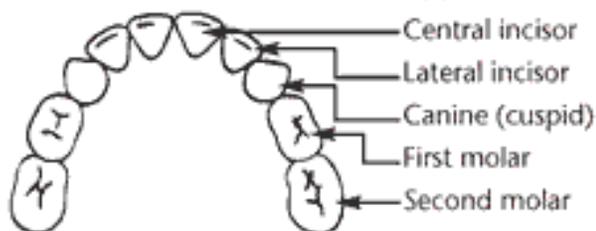
Tooth development in children is individualized and eruption times will vary. Some children will get teeth a few years before or after the average age guidelines.

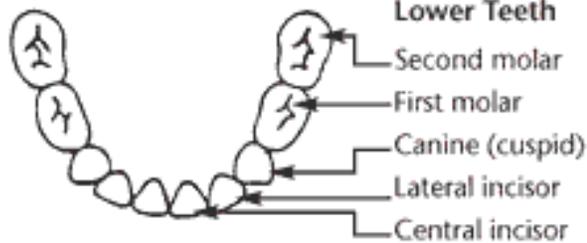
On the next page is a Tooth Eruption Chart showing baby and permanent teeth and the ages they come in.

⁶ Opposition to Prophylactic Removal of Third Molars (Wisdom Teeth). American Public Health Association. Retrieved from: www.apha.org/advocacy/policy/policysearch/default.htm?id=1371

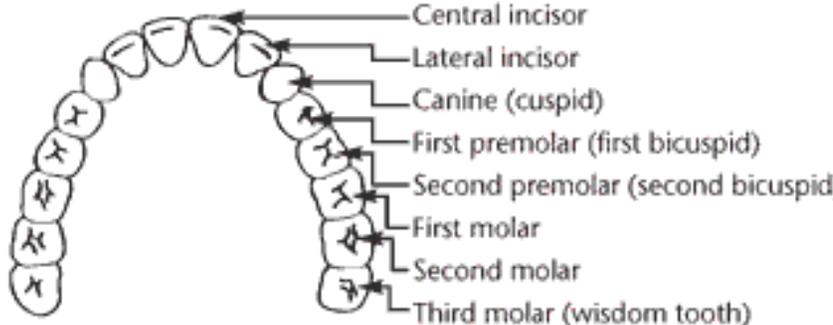
Tooth Eruption Chart

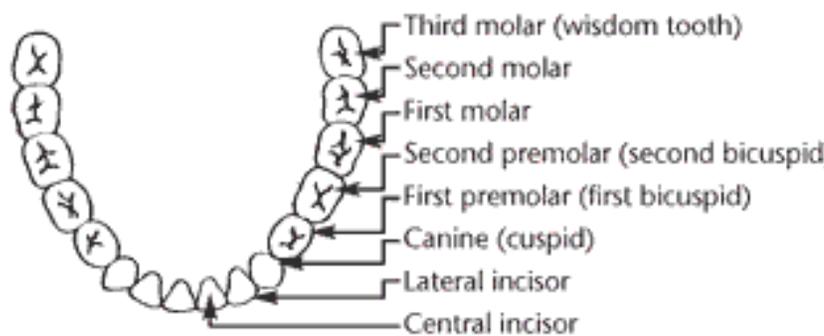
PRIMARY DENTITION

	Upper Teeth	Erupt	Exfoliate
	Central incisor	8-12 months	6-7 years
	Lateral incisor	9-13 months	7-8 years
	Canine (cuspid)	16-22 months	10-12 years
	First molar	13-19 months	9-11 years
	Second molar	25-33 months	10-12 years

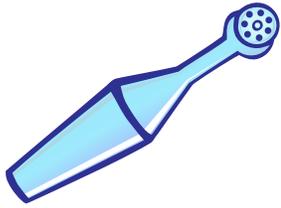
	Lower Teeth	Erupt	Exfoliate
	Second molar	23-31 months	10-12 years
	First molar	14-18 months	9-11 years
	Canine (cuspid)	17-23 months	9-12 years
	Lateral incisor	10-16 months	7-8 years
	Central incisor	6-10 months	6-7 years

PERMANENT DENTITION

	Upper Teeth	Erupt
	Central incisor	7-8 years
	Lateral incisor	8-9 years
	Canine (cuspid)	11-12 years
	First premolar (first bicuspid)	10-11 years
	Second premolar (second bicuspid)	10-12 years
	First molar	6-7 years
	Second molar	12-13 years
	Third molar (wisdom tooth)	17-21 years

	Lower Teeth	Erupt
	Third molar (wisdom tooth)	17-21 years
	Second molar	12-13 years
	First molar	6-7 years
	Second premolar (second bicuspid)	10-12 years
	First premolar (first bicuspid)	10-11 years
	Canine (cuspid)	11-12 years
	Lateral incisor	8-9 years
	Central incisor	7-8 years

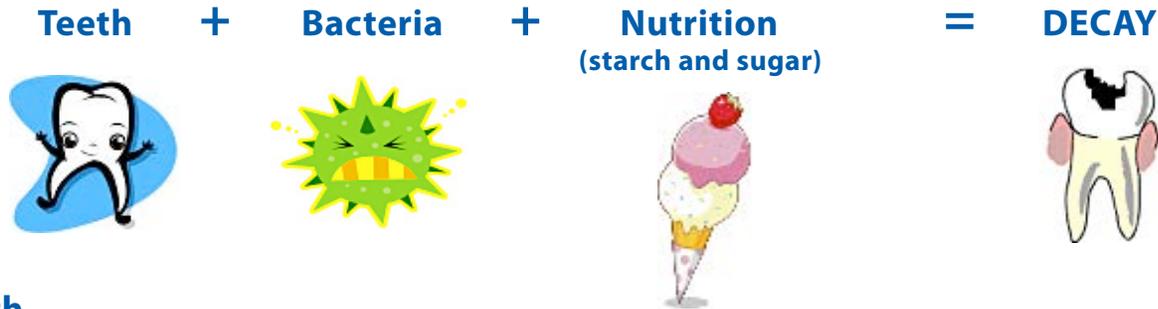
Source: Adapted with permission from the Arizona Department of Health Services, Office of Oral Health, courtesy of Don Altman, D.D.S., M.P.H. The assistance of the American Dental Hygienists' Association is gratefully acknowledged.



Unit 3

The Tooth Decay Process

Tooth decay is a complex, chronic disease process that involves three factors: teeth, bacteria, and nutrition (starch and sugar).



Teeth

The outer layer of the tooth, called “enamel,” is the hardest substance in the body. Even though it is harder than our bones, it is not strong enough to support mouth acids caused by the introduction of bacteria and sugar.

Bacteria

The mouth has bacteria that helps produce important substances for our body. If fed too many carbohydrates, these bacteria will multiply and stick to the tooth in the form of a sticky, colorless dental plaque.

Nutrition (starch and sugar)

Starches and sugars, especially those that stick to the teeth, contribute to tooth decay if used too often and are “out of balance” with other foods. Starch (bread, cereal, crackers) and fructose (juices, raisins, fruit) are broken down into sugars by saliva. Bacteria use these sugars to produce mouth acids that will attack the outer enamel layer and cause tooth decay.

Decay

Mouth acids attack the tooth enamel and create holes called “tooth decay.” The more often we feed the bacteria, the more acids are produced and the more tooth decay we cause. Left alone, the tooth decay will grow deeper into the tooth until it reaches the internal nerve (pulp) and the end of the tooth roots, causing an abscess. Unnecessary pain and discomfort can occur throughout the tooth decay process. When an abscess or severe infection forms in the tooth, it is important to see a dentist as soon as possible.

The role of saliva

The salivary glands produce saliva while chewing, which dissolves some of the food. It is important to drink plenty of water to keep our saliva working properly. Saliva helps remove food from the teeth and neutralizes the mouth acids produced by bacteria. Saliva also contains calcium and fluoride that help repair early decay.

What to do?

In order to prevent tooth decay, it is important to strengthen the tooth to withstand acid attacks and decrease the amount of mouth acids. This can be accomplished by:

- drinking water with recommended levels of fluoride
- brushing with fluoride toothpaste **after** breakfast and before bed
- avoiding starch and sweets between meals (decreasing the amount of acids in the mouth)
- drinking plenty of water to produce saliva throughout the day



Unit 4

Preventing Tooth Decay: Fluoride, Sealants, Nutrition

Fluoride

Fluoride remineralizes the tooth's outer enamel layer by carrying calcium from saliva to the tooth. This keeps the teeth strong and able to resist mouth acids produced by bacteria. Fluoride benefits both the teeth that are developing under the gums, as well as the teeth that are already present in the mouth. Therefore, fluoride is important for both children and adults.

Keeping the teeth healthy requires constant daily exposure to fluoride at the recommended levels. Fluoride is found naturally in water and is adjusted to recommended levels to provide maximum benefits to dental health. If you live in an area without fluoride in the water, your dentist or pediatrician may recommend supplemental fluoride tablets or drops. Topical fluoride can be applied as varnish or gels at a dental office, a pediatrician office, or a school-based or community center program.

At home, it is recommended to brush teeth with fluoride toothpaste or rinse with fluoride mouthwash **after** breakfast and before dinner.

Impact of fluoride

Fluoride has a positive effect on the teeth of children and adults. Fluoridated water is the most cost-effective measure to prevent tooth decay.⁷

Sources of fluoride that strengthen the **developing teeth** under the gums in children and adolescents include:

- Fluoridated water
- Prescription tablets
- Prescription fluoride drops

Sources of fluoride that strengthen the **teeth already present in the mouth** in children and adults include:

- Fluoride toothpaste
- Fluoride mouth rinse
- Professionally applied fluoride foams and gels
- Professionally applied fluoride varnish

Sealants

The molars in the back of the mouth have natural grooves (called pits and fissures) where bacterial plaque and food particles can collect. The bristles of a toothbrush cannot reach these tiny pits and fissures, making molars an excellent candidate for decay.

The first permanent molars come in around age six, and second permanent molars around age 12. It is important to seal these teeth as soon as they erupt before they have a chance to decay.

⁷ Centers for Disease Control and Prevention: Community Water Fluoridation. Retrieved from: www.cdc.gov/Fluoridation/benefits.htm#3

Application of a sealant is simple, fast, and inexpensive. It only requires a few minutes for each tooth. A dental professional thoroughly cleans the surface of the tooth and then applies the sealant. The sealant is set with a special light that allows it to harden. Sealants can last for as long as 5–10 years. Over time, it is important to check if sealants have worn away and need to be replaced.

In Washington, sealants may be applied in a school-based program by licensed dental professionals. Check with your local health department to see which schools and professionals provide sealants in your area. The American Dental Association and the Centers for Disease Control and Prevention recommend sealants for all children.^{8,9}

Healthy nutrition

Good nutrition will contribute to both good oral health and good general health. Children who eat balanced meals and snacks with a wide variety of fresh, canned, or frozen fruits and vegetables are more likely to have healthy teeth and healthy bodies.

A balanced diet provides adequate vitamins, minerals, and fiber, and is low in fat. For healthy nutrition, the Food Pyramid¹⁰ recommends daily consumption of:

- **Grains:** 6 oz., with at least half your grains as whole grains.
- **Vegetables:** Color your plate with 2½ cups of all kinds of great tasting veggies.
- **Fruit:** 1½ cups of whole fruit, not juice.
- **Dairy:** 3 cups of fat-free or low fat milk (kids ages 2–8 only need 2 cups).
- **Protein:** 5 oz. of lean meat, chicken, or turkey. Eat more fish, beans, peas, nuts, and seeds.

Limit sugar and starch intake. Choose foods and beverages that do not list sugar and caloric sweeteners as one of the first ingredients. Below are some hints to remind you how to eat healthy.

A graphic titled "Traffic Light System" enclosed in a rounded orange border. On the left is a vertical traffic light with three lenses: red at the top, yellow in the middle, and green at the bottom. To the right of the traffic light, text explains the color coding for food choices.

Traffic Light System

RED = STOP
Foods and drinks in this group have too much fat, starch, sugar, or salt. These items give you too much energy and not enough nutrients. Avoid red light foods or eat them only occasionally.
Examples: soda pop, candy, cakes, and cookies.

YELLOW = THINK
Foods and drinks in this group contain some fat, added sugar, or salt. Eat yellow light foods in small amounts.
Examples: juice, dried fruits, sweetened cereals, chips, crackers, and raisins.

GREEN = GO
Foods and drinks in this group are healthy choices, with lots of nutrients and low amounts of fat, added sugar, and salt. Eat green light foods daily and at every meal.
Examples: fruits, vegetables, cheese, whole grains, milk, and water.

⁸ Centers for Disease Control and Prevention: Dental sealants.
Retrieved from: www.cdc.gov/OralHealth/publications/factsheets/sealants_faq.htm

⁹ American Dental Association: Sealants. Retrieved from: www.ada.org/4194.aspx?currentTabs=2

¹⁰ US Department of Agriculture Food Pyramid.
Retrieved from: www.mypyramid.gov/global_nav/media_animation-presentation_eng_pc.html

The problem with sugar

Foods high in sugar supply calories with little or no protein, vitamins, or minerals. Sugars include white sugar, brown sugar, raw sugar, corn syrup, fructose, honey, and molasses. To avoid getting too many calories from sugar, the Food Pyramid recommends limiting daily sugar intake. If a student consumes around 2,000 calories, the average amount of sugar per day should be limited to 10 teaspoons or the equivalent 40 grams. One can of soda pop, on average contains 44 grams of sugar, or 11 teaspoons of sugar. Soda also contains phosphoric acid which can lead to the breakdown of tooth enamel.

Snack foods can easily contribute more sugar than recommended for the entire day. Sugar content is now included on all food labels. To determine teaspoons of sugar from grams of sugar provided on food labels, simply divide by four.

Example: Chocolate Granola Dippys (1 bar)

$$15 \text{ grams of sugar} \div 4 = 3\frac{3}{4} \text{ teaspoons of sugar}$$

Nutrition and dental diseases

Dental diseases affect the ability to eat. Students that are missing teeth or have a toothache may limit healthy food choices (such as fruits and fibers) due to chewing problems, which may result in choosing foods that are softer and less nutritious. Continuous inadequate nutrition during childhood can have detrimental effects on a student's cognitive development and readiness for school. Nutritional deficiencies also negatively affect school performance, ability to concentrate and perform complex tasks, as well as classroom behavior.

Starches and sugars, especially those that stick to the teeth, contribute to tooth decay if used too often and are “out of balance” with other foods. Starch (bread, cereal, crackers) and fructose (juices, raisins, fruit) are broken down into sugars by saliva. Bacteria use these sugars to produce mouth acids that will attack the outer enamel layer and cause tooth decay. It is recommended that snacks between meals are not made of starch or sugars but of fruits, vegetables, or milk. It is important to eat a balanced meal to prevent the onset of dental disease.

TOOTH TRIVIA

The first electric toothbrush was sold 40 years ago.

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia





Unit 5

Oral Hygiene: Tooth Brushing and Flossing

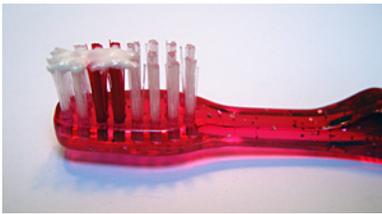
Tooth brushing

It is important to brush daily to prevent tooth decay. Scientific evidence recommends water fluoridation and brushing twice daily with fluoride toothpaste. This combination maintains elevated saliva fluoride levels that will protect the teeth from tooth decay.

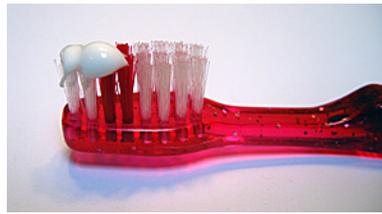
Tooth brushing with fluoride toothpaste needs to happen at least twice a day (**after** breakfast and before going to bed). Spit out all excess toothpaste after brushing, but do **not** rinse your mouth with water. The small amount of fluoride toothpaste that remains in the mouth helps prevent tooth decay.

Toothpaste

- **Before age 2**, children should not use fluoride toothpaste unless it is recommended by their dentist or physician (who will assess whether the child is at high risk for tooth decay).
- **For children under age 2 who are at high risk for tooth decay**, use a smear of toothpaste on their toothbrushes when it is advised by a dentist or physician.
- **After age 2**, children can use a small pea-sized amount of toothpaste.
- Tooth brushing without fluoride toothpaste is not very effective in preventing tooth decay.



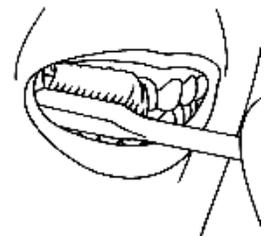
A smear (under age 2)



A small pea (after age 2)

Brushing

Place the toothbrush so that it is half on the tooth and half on the gums, at a 45-degree angle. Then use very small controlled circular or vertical patterns to brush the teeth and gum line. Only brush a few teeth at a time. Brush for at least 2 minutes, brushing every surface of every tooth, inside and outside, including the tongue. Be sure to brush the flat, chewing surfaces of your top and bottom teeth. These surfaces have many deep grooves where bacteria can hide in the natural grooves in teeth. Electric or sonic toothbrushes may be fun but are not necessary for young children, especially for those with special needs.



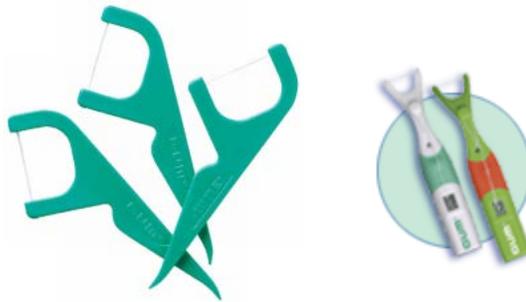
Flossing

Dental floss is necessary to remove bacteria from between the teeth, where bacterial plaque and food may accumulate. Proper tooth brushing does not reach these areas. Both children and adults need to floss daily to help prevent tooth decay located between teeth. Flossing needs to occur once a day, preferably before going to bed. Children under 8 years of age and those with special needs require parent support to floss their teeth. Learning to use floss or a flossing device requires skill and practice.



How to floss

- Break off about 18 inches of floss and wind most of it around one of your middle fingers. Wind the remaining floss around the same finger of the opposite hand. This finger will take up the floss as it becomes dirty. Hold the floss tightly between your thumbs and forefingers.
- Guide the floss between your teeth using a gentle rubbing motion. Never snap the floss into the gums.
- When the floss reaches the gum line, curve it into a C shape against one tooth. Gently slide it into the space between the gum and the tooth.
- Hold the floss tightly against the tooth. Gently rub the side of the tooth, moving the floss away from the gum with up and down motions.
- Repeat this method on the rest of your teeth.
- Don't forget the backside of your last tooth.
- Children may like a circle of floss tied in the middle or a flossing aid. Below are examples of flossing aids:



Brushing and flossing in schools and group settings¹¹

In a school setting, supervise tooth brushing to ensure that toothbrushes are not shared and that they are handled properly. The likelihood of toothbrush cross-contamination in these environments is very high, either through children playing with them or toothbrushes being stored improperly. Contamination with blood from gingivitis or a loose tooth is possible during classroom brushing. Although the risk for disease transmission through toothbrushes is minimal, it is a potential cause for concern. Therefore, officials in charge of tooth brushing programs in these settings should evaluate their programs carefully.

Recommended measures for hygienic tooth brushing in schools:

- Ensure that each child has his or her own toothbrush, clearly marked with identification. Do not allow children to share or borrow toothbrushes.
- To prevent cross contamination of the toothpaste tube, put an age-appropriate amount of toothpaste onto a piece of wax paper or small paper plate before putting it on the toothbrush. Do not let a toothbrush touch the toothpaste tube.

After the children finish brushing, make sure they rinse their toothbrushes thoroughly with tap water, allow them to air dry, and store them in an upright position so they don't come in contact with other children's brushes.

Provide children with paper cups to use for rinsing after they finish brushing. Do not allow them to share cups, and make sure they dispose of the cups properly after a single use.

¹¹ Centers for Disease Control and Prevention. The use and handling of toothbrushes.
Retrieved from: www.cdc.gov/oralhealth/infectioncontrol/factsheets/toothbrushes.htm



Unit 6

Tobacco, Alcohol, and Illicit Drugs

Tobacco

Tobacco remains the main cause of preventable disease and death in Washington State, killing about 7,500 people every year. The Washington State Department of Health started the Tobacco Prevention and Control Program nearly ten years ago¹², which has led to a significant reduction in smoking. Still, there is more work to be done.

Smoking tobacco

Although adult smoking has declined from 22 percent in 1999 to 15 percent in 2009, about 750,000 Washingtonians still smoke. Racial, ethnic, and low socioeconomic groups have higher rates of smoking and exposure to secondhand smoke.

Youth smoking has dropped by 50 percent, but 75,000 of our youth still smoke. In fact, 45 kids start smoking every day. Many of them are using other types of tobacco, such as cigars, smokeless products, chew, snuff, pipes, and flavored cigarettes (bidis), all of which have a serious impact on health and oral health.

Spitting tobacco

There are over 7 million spit tobacco users in the United States. Most are males from elementary school age and above. The two newest forms are small ropes of chewing tobacco (twists) and snuff that look like a small tea bag (sachets). Tobacco companies flavor these products to attract young users. In the 2008 Washington Healthy Youth Survey, 9 percent of rural and 6.5 percent of non-rural students reported some use of spit tobacco. Since 2000, the greatest cause for concern is increased use of “dipping” snuff among 8th and 10th graders.

Spit tobacco is incorrectly promoted as a safe alternative to cigarette smoking. Advertisers promote it as a masculine, attractive, and socially acceptable practice. The spit tobacco habit is viewed as the perfect answer for active people who need to use their hands to pursue a career, hobby, or leisure activity. People who cannot smoke in the workplace often use spit tobacco. Spit tobacco increases the risk of oral cancer and other health problems because it contains high amounts of cancer-causing substances. It also contains the stimulant nicotine, capable of creating a strong dependence similar to cigarettes.

Effects of tobacco on the body

Tobacco affects many parts of the body, which can lead to health-related problems:

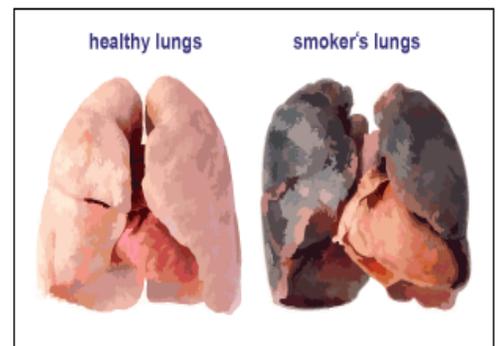
- Nicotine causes the release of a chemical in the **brain** that makes tobacco users crave tobacco.
- Smoking causes the **heart** to work harder to pump blood, due to hardening of the inner layer of the arteries. This extra stress on the heart can lead to high blood pressure, heart attack, and stroke.
- Smoking blocks the airways, impairs the **lungs**, and increases the risk of lung cancer and other respiratory diseases.
- Smoking ages and wrinkles the **skin**.
- Tobacco can cause **bladder, kidney, and stomach** cancer.
- Long-term tobacco use can stain the **fingers** yellow.

¹² Washington State Department of Health Tobacco Program. Retrieved from: www.doh.wa.gov/tobacco/

- In the **mouth**, tobacco causes:
 - ◆ Gum disease, which leads to sensitivity to cold, loss of supporting bone and teeth, cancers of the mouth, throat, and esophagus.
 - ◆ Tooth decay, due to its high level of sugar (used to improve its taste).
 - ◆ Bad breath, teeth stains, and a decrease in the sense of taste and smell.
 - ◆ Tooth abrasion, due to the high level of sand and grit in spit tobacco that wears away the tooth enamel.

Other diseases linked to tobacco use

- **Cancer.** A disease in which abnormal cells grow and spread uncontrollably. Smokers have an increased risk of cancers in the mouth, throat, breast, lungs, and pancreas. Smoking is the leading cause of death from cancer.
- **Chronic Bronchitis.** People with bronchitis must cough to dislodge abnormal amounts of mucus blocking the airway.
- **Respiratory Infections.** Smoking rids the body of vitamin C, which helps keep the immune system strong. It often appears as colds, bronchitis, and pneumonia.
- **Emphysema.** Air sacs in the lungs are damaged by smoking. As a result, the body does not get all the oxygen it needs.
- **Asthma.** A chronic inflammatory disease of the airways. Secondhand smoke exposure causes children who already have asthma to experience more frequent and severe attacks.
- **Oral Leukoplakia.** A condition that may develop into cancer. Appears as white or red sores of the soft tissue of the mouth. The sores may be thickened, cracked, or hardened patches.



Reduce your risk of losing teeth, or developing gum disease or oral cancer, as well as lung cancer and a variety of other diseases and conditions. Call the Washington Tobacco Quit Line toll-free at 1-800-QUIT-NOW (784-8669) to speak to a trained “quit coach” about how you can double your chances of quitting. You don’t have to do it alone.

Smokers are 4 times more likely than people who have never smoked to have advanced gum disease, which leads to tooth loss.¹³

Smokers are 2–18 times more likely to develop oral cancer than non-smokers.

Smokeless tobacco users are up to 50 times more likely to develop oral cancer in areas where the tobacco touches oral tissues, than those who do not use it.

¹³ American Academy of Periodontology. Retrieved from: www.perio.org/consumer/smoking.htm

Alcohol

Alcohol use is very common in our society. American teens use more alcohol than tobacco or illicit drugs. Drinking alcohol has immediate effects that can increase the risk of many harmful health conditions. Underage drinking is our state's biggest drug problem. **Each year, alcohol kills more kids than tobacco and illicit drugs combined.**

Among youth, the use of alcohol and other drugs are linked to unintentional injuries, physical fights, low academic scores, occupational problems, and illegal behavior. Long-term alcohol misuse is associated with liver disease, cancer, cardiovascular disease, neurological damage, as well as psychiatric problems such as depression, anxiety, and antisocial personality disorder.

Excessive alcohol use means drinking more than two drinks per day on average for men, and more than one drink per day on average for women. Binge drinking consists of five or more drinks during a single occasion for men, or four or more drinks during a single occasion for women. Excessive drinking can lead to increased risk of health problems such as liver disease or unintentional physical injuries to both your body and teeth.

Prolonged alcohol use can cause large salivary glands and reduced saliva flow. With less saliva available, the mouth is unable to neutralize acid, leading to more tooth decay. Alcohol combined with frequent sweet beverages and poor oral hygiene increases the risk for tooth decay and gum disease.

Many drinkers also smoke tobacco; this combination increases the risk for gum disease and oral cancer. Some oral cancers, especially of the tongue and floor of the mouth, develop in those people who abuse both alcohol and tobacco products. Nutritional deficiencies in alcoholics are common; signs include a smooth shiny tongue, fissures in the corners of the mouth, and gingivitis.

Illicit drugs

Methamphetamine (Meth)

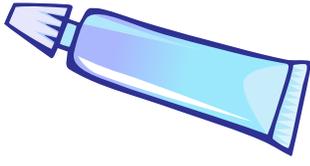
Poor oral health is one of the side effects of meth use. Meth addicts often suffer terrible tooth decay caused by chemical ingredients and lack of oral hygiene (known as “meth mouth”). In many cases, meth leads to the **loss of all teeth** in a very short time.

How meth damages teeth

- **Poor personal care.** Meth addicts tend to be aloof and ignore personal hygiene, which leads to little or no tooth brushing or flossing. They also may forget to eat balanced meals and tend to crave sugar. The combination of these factors lead to weak teeth, gum disease, and other problems.
- **Dry mouth.** The use of meth reduces the production of saliva, which offers natural protection to teeth and gums. Meth users sometimes sleep for more than 24 hours at a time, and often with their mouths open, which worsens the dry mouth. With dry mouth, teeth are more likely to decay and gums to bleed.
- **Cracked teeth.** Meth users tend to grind and clench their teeth, resulting in cracked teeth. This happens while using the drug and afterwards during the withdrawal period.

Ignoring the consequences of using meth can lead to serious health problems. Gum disease can develop, teeth may begin to fall out, and oral cancer becomes a risk. Disease in the mouth can also spread to other parts of the body. Poor oral hygiene can weaken the immune system, leaving someone with meth mouth more vulnerable to colds and the flu, and other attacks on the respiratory system.

Once there is damage to the mouth from drugs or substance abuse, it is not reversible. Severe tooth decay is expensive to treat and cannot be cured. Meth users may need multiple root canals or dental implants to replace damaged teeth. Gum grafts or surgeries may also be necessary. Other illicit drugs can lead to similar problems, but they are not as aggressive as meth use.



Unit 7

Injury Prevention

Be prepared! Dental emergencies can and do happen in the school and childcare settings. Injuries to the head, face, and mouth are common among children. Injuries to children are more common during periods of rapid growth. Follow the safety rules below to protect your head, face, and teeth in different settings.

Playgrounds

- Most dental injuries (broken or lost teeth) in children occur on playgrounds. Children fall and bump their teeth on tables, floors, slides, swings, bikes, drinking fountains, and each other. Teach children in your school how to be safe on the playground.
- Supervise the child on playground equipment. Make sure children play only on developmentally appropriate equipment.
- Make sure that playgrounds are carefully maintained and that equipment is in good condition. All playground equipment should be surrounded by a soft surface (e.g., fine, loose sand; wood chips; wood mulch) or by rubber mats manufactured for this use.

Sports

- Teach children to wear protective gear, such as a mouth guard, a face protector, and a helmet for sports activities. This includes riding a bicycle, tricycle, or scooter. Skateboarding, snowboarding, inline skating, and team sports also require protective gear.
- Mouth guards are necessary for contact sports. Mouth guards absorb energy during an impact and they are a necessity in contact sports because of their ability to prevent dental trauma and traumatic brain injury.

Car seats

- Children can have severe body and dental injuries in car accidents. Encourage parents and children to use car seats and safety belts in cars or other means of transportation (trains, planes, etc.).
- In the state of Washington, infants are to ride in rear-facing infant seats until they are 1 year old or weigh 20 pounds. Children 1 to 4 years old or weighing 40 pounds are to ride in forward-facing child car seats. A child who is less than 8 years of age or 4'-9" tall (whichever comes first) must be properly restrained in a child booster seat when both lap and shoulder belts are available. Children under age 13 should ride in the back seat, where it is practical to do so.

Pets

At home, keep pet food and dishes out of reach. Encourage parents not to permit children to approach the pet while it is eating.¹⁴ An angry pet can attack children and injure their face.

Toothache

Children with dental pain may act out and not be able to identify and tell others that their teeth are hurting. They may not participate normally in classroom activities. Children can develop a toothache following dental treatment, especially if the treatment was extensive.

¹⁴ Bright Futures Oral Health Pocket Guide, by the National Maternal and Child Oral Health Resource Center. Retrieved from: www.brightfuturesforfamilies.org/pocket_guide.shtml

First aid – lost tooth

- Children can lose teeth in the playground or during other school accidents (see Appendix C, Unit 7, Injury Prevention).
- Learn how to practice first aid in case of avulsed (lost) permanent tooth. Hold the tooth by the crown (top) only, not the root. Rinse the tooth under cold water gently and do not scrub. To increase the chances of saving a lost permanent tooth, place the tooth in a secure container of cold milk or in a wet cloth.
- Because of the danger of damaging the underlying permanent teeth, never attempt to reinsert a lost primary tooth. It is impossible to relocate the tooth accurately, and there is danger of pushing it too far into the soft alveolar bone.
- Be sure to have the child's dentist listed in the emergency phone contacts. It is important that the child is able to get to a dentist within two hours.
- Primary teeth that come out may be due to normal loss. Celebrate growing up! If a baby tooth is lost prematurely, it is best to see a dental professional. For excessive bleeding after losing a baby tooth, place a clean folded gauze pad, or a cloth or paper towel over the spot that is bleeding. Have the child bite on the gauze with pressure for 15 minutes. Change the gauze and repeat if necessary. Avoid rinsing.



TOOTH TRIVIA

Sharks may grow 20,000 teeth in a lifetime. The teeth of the feared great white shark measure three inches long. The largest shark—the 40-foot whale shark—has the smallest teeth of any shark. They are only 1/8th of an inch tall.

Source: Delta Dental of New Jersey (2010)
Kids Club: Dental Trivia



Unit 8

Teen Oral Health

Teenagers face oral health issues that are not common to younger ages, such as the following:

- **Appearance and self-image** are important to teens. Support students' desires to be attractive in healthy ways. Let them know that crooked, crowded, or discolored teeth can be improved with help from dentists or orthodontists.
- **Bad breath** is a curable problem caused by strong foods, smoking, alcohol, stomach disorders, bacteria, or other medical problems. Brushing and flossing every day will help prevent bad breath. Tongue brushing or scraping also helps.
- **Eating disorders** can cause severe overall health problems as well as permanent loss of tooth enamel. Professional help is needed for these conditions.

Piercings

Oral piercings, tattoos, and decorative grills carry the risk of infection from hepatitis, HIV, and tetanus, as well as permanently receded gums. Piercing the tongue can cause bleeding, choking, and allergic reactions that may cause swelling of the throat that is serious enough to block the airway. Some infections in the mouth can spread quickly to the heart and bloodstream, and can become very serious or even fatal.

Removing the bacteria after every meal is very important for teens with oral piercings. The piercing may harbor bacteria that can lead to infections, gingivitis, and bad breath. It is important not to develop a habit of “playing” with the piercing inside the mouth; the jewelry can injure the gums, causing them to pull away from teeth. Once this happens, the gum tissue will not grow back. Wearing mouth jewelry is risky; it can chip, crack, or scratch your teeth, causing permanent damage.

Dental sealants

Sealants are very effective in preventing tooth decay. Check dental sealants periodically and replace as needed. It is beneficial to place sealants on the second molars of teens. Some teens are at higher risk for tooth decay due to choosing their own diet. A healthy diet low in sugar, limited snacking, and good daily oral hygiene are essential in preventing tooth decay and irreversible tissue damage from gum disease.

Nutrition and eating disorders

Frequent consumption of soda, sports drinks, or any sugar-containing beverage can cause tooth decay. Sugar combines with bacteria in the mouth, creating an acidic environment which leads to tooth decay. All soda, including sugar-free soda contains phosphoric acid which reduces the pH and harms the teeth. Phosphoric acid interferes with the body's ability to absorb calcium needed for strong bones and teeth. Each time a sugar-based beverage or a diet soda is consumed, an acid attack begins on the teeth that lasts for 20 minutes. To protect teeth, limit sugar-containing beverages to only one per day, preferably at meal time.

Eating disorders occur in 1–3 percent of the population. Eating disorders, such as anorexia nervosa and bulimia can cause severe overall health problems: malnutrition, abnormal blood counts, irregular heart rhythms, low blood pressure, dizziness, dehydration, bone loss, and permanent loss of tooth enamel. Eating disorders may also cause tooth decay, gum disease, dry mouth, sensitive teeth, and bacterial or fungal infections of the mouth. Many young adults try to hide their disorder. It is important to seek professional help for these conditions.

Safety

Keep your mouth and teeth safe. Avoid using your teeth to cut things (string, plastic packages, fishing line), hold onto pens or pencils, bite your nails, crack nuts, crunch on ice or under popped popcorn, or open bottles or hairpins.

Sports and protective gear

Young adults participate in a variety of activities. It is important to wear protective gear for each activity. Use helmets for football, baseball, snowboarding, skateboarding, biking, and motorsports. Some sports and activities require a face protector, and contact sports require a mouth guard. Mouth guards absorb energy during an impact; they are a necessity in contact sports because of their ability to prevent dental trauma and traumatic brain injury.

Overall health

A healthy mouth is also important for overall body health as many systemic diseases first appear in the mouth. Teens and adults suffering from poor oral health fail to be productive in both the school and work environment. Oral infections may be associated with high blood sugar levels in diabetics, cardiovascular disease, and respiratory disease. Tooth decay and gum disease are chronic diseases that are caused by lifestyle choices.

Good oral hygiene habits

Teens need to continue good oral hygiene habits:

- Brush with fluoride toothpaste **after** breakfast and before going to bed.
- Floss teeth once a day, preferably before going to bed.
- Brush the tongue well to remove bacteria and prevent bad breath.
- Drink water that contains fluoride at recommended levels.
- Use fluoride daily while in braces to prevent white spot lesions (beginning tooth decay).
- Have sealants checked for retention.
- Visit their dental professional as recommended.

TOOTH TRIVIA

Every person has a unique tongue print.

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia





Unit 9

The Mouth is Important to the Body

“Oral health is essential to the general health and well-being of all Americans.”

Report Oral Health in America, A Report of the Surgeon General, 2000

Oral health means more than healthy teeth. What goes on in your mouth can affect the rest of your body. The mouth is a gateway to the whole body, and the health of the mouth is a reflection of total body health.

The word “oral” refers to the mouth, which includes not only the teeth, gums, and supporting tissue, but also the hard and soft palate, the mucosal lining of the mouth and throat, the tongue, the lips, the salivary glands, the chewing muscles, and the jaw. The salivary glands are a model of other exocrine glands, and an analysis of saliva can provide clues of overall health or disease. A thorough oral examination can detect signs of nutritional deficiencies as well as a number of systemic diseases, including infections, immune disorders, injuries, and some cancers.

The human mouth is home to millions of microorganisms, most of them harmless. Under certain conditions, however, some bacteria can cause oral infections, such as tooth decay or gum disease. The bacteria responsible for gum disease can also attack gum tissue, tooth ligaments, and bone.

The mouth, lungs, intestines, and intestinal tract are potential entry sites through which a multitude of bacteria may gain access to the body. This can cause trouble in people with a weakened immune system. Dental diseases share common risk factors with chronic respiratory diseases, diabetes, cancer, and cardiovascular disease. Risk factors may include an unhealthy diet, lack of exercise, poor oral hygiene, tobacco, and alcohol use. The inflammation associated with gum disease may be a risk factor for heart disease and rheumatoid arthritis.

The following conditions are associated with poor oral health:

Diabetes

The two-way relationship between diabetes and oral health has been widely studied. People with diabetes are more susceptible to periodontal disease and have an earlier onset of severe periodontal disease than do non-diabetics. Diabetics with periodontal disease have more difficulty in controlling their blood sugar and therefore suffer from worsened diabetes. Gum disease has been called “the sixth complication of diabetes.” Gum disease triggers the body’s inflammatory response which can affect insulin sensitivity and ultimately lead to unhealthy blood sugar levels. Diabetics react poorly to gum infections due to reduced immune response and reduced ability for tissues to heal. It is important for diabetics to receive routine dental care to help keep diabetes under control, and also keep their blood sugar levels under control to prevent problems in the mouth.

Heart disease and stroke

Recent studies point to a link between gum disease and heart disease and stroke. The risk increases with the severity of the oral infection.

Pregnancy

Some studies have found that mothers of pre-term, low birth weight infants tend to have more severe gum disease than mothers of normal birth weight babies. More research is under way on this topic.

Respiratory infections

The bacteria that cause respiratory diseases are found in significantly higher concentrations in people with gum disease. Gum disease can adversely affect respiratory diseases, such as pneumonia, chronic bronchitis, and chronic obstructive pulmonary disease. The elderly and patients with compromised immune function are particularly susceptible.

Medication side effects

Medicine taken for other medical conditions may cause dry mouth, which can increase your risk of tooth decay, oral yeast infections, and other oral infections.

Oral cancer and HIV/AIDS

The mouth can act as an early warning system and a signal for other parts of the body. Oral cancer, AIDS, and osteoporosis are examples of conditions often first found in a dental setting. Mouth lesions and other oral conditions may be the first sign of HIV infection, and are used to determine the stage of infection and to follow its progression to AIDS.

Obesity

Healthy teeth and gums help you chew nutritious foods, such as fruits and vegetables. Decayed teeth and bleeding gums generally lead people to eat softer, mashed, or liquid diets that are less nutritious, are richer in sugar, and can lead to obesity.

What you can do to maintain good oral health and overall health

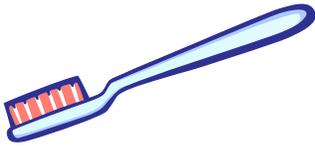
- Drink fluoridated water and use fluoride toothpaste.
- Take care of your teeth and gums to prevent gingivitis and periodontal disease. Use dental floss daily; brush with a soft toothbrush, with fluoride toothpaste, **after** breakfast and before bedtime.
- Avoid tobacco and illicit drugs.
- Eat a healthy diet by avoiding frequent snacks containing sugars and starches.
- Exercise daily. Children and youth need 60 minutes a day. Adults need 150 minutes of moderate activity each week and strength training twice a week.
- If you are diabetic, control your blood sugar, and brush and floss at least twice a day to help prevent diabetic complications.
- Many medications cause dry mouth. Chew sugarless gum or lozenges to increase saliva production, and let your doctor or pharmacist know if you have dry mouth.
- Visit medical and dental providers at least once a year.

TOOTH TRIVIA



**It takes 17 muscles to smile
but 43 to frown.**

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia



Unit 10

Visiting the Dental Office

Preparing the child

It is important that children and youth are well rested when visiting the dental office, as it might seem like an unfriendly place to some children. It is important never to say the words “hurt” or “pain” around children when discussing a visit to the dentist. Saying the words “it won’t hurt” instills the possibility of pain into the child’s thought process. Keep the discussion about visiting the dentist cheerful and positive.

The dental team

A dental office is a place where a dental team can check the health of your teeth, head, neck, gums, and mouth. The members of the dental team are:

- **The Receptionist** works at the front desk and greets you when you come in.
- **The Dental Assistant** helps the dentist and dental hygienist get the exam room ready to receive you, and take X-rays as necessary.
- **The Dental Hygienist** is trained to provide education and treatment to prevent tooth decay and gum disease.
- **The Dentist** is a doctor who checks the health of your head, neck, mouth, teeth, and gums. The dentist identifies problems, and treats and repairs damaged and decayed teeth. She or he can provide oral health education and preventive treatments, such as sealants and fluoride.

Visiting the dental office

Feel free to use the following script with students:

When visiting the dental office, you will first meet the receptionist. You may have to sit in the lobby for a few minutes before your appointment. Your parent or guardian will fill out a history of your health. When the dentist or dental hygienist is ready to see you, someone will call your name and lead you to the dental chair for your exam.

You will be escorted to the dental treatment room and be seated in a dental chair. To protect your clothing, the dental assistant will place a paper bib around your neck and give you protective eyewear. Once you are in the treatment room, you will find very interesting tools and equipment.

The dental chairs move up and down so that people of different sizes can sit in them. The chair can recline as the dentist looks into your mouth with the help of a bright light above the chair. The dental office uses a tiny hose called an air-water syringe that sprays water or air into your mouth. Near the chair will be a suction device that looks like a straw. It is used to remove any extra water or saliva from your mouth. In addition, there may be an X-ray machine to take pictures of the sides of your teeth. Some offices have a tooth camera to take pictures of the teeth, which you and the dentist will look at on a computer screen.

The dentist, dental hygienist, and assistant will be wearing gloves during the treatment to prevent passing germs, special eye glasses to protect eyes from splatter, a mask to protect the nose and mouth, and long gowns or lab coats to protect their body. They will first do a “dental exam” of your head, neck, and mouth. That means the dentist or dental hygienist will look in your mouth for many things. The dentist uses a special mirror with a long handle-like toothbrush to look at the back of the teeth. The dentist will count your teeth, look to see if you are brushing properly, check if your teeth are growing correctly, and look for tooth decay. Your dentist or dental hygienist will check the lymph nodes of your neck and chin, the tongue, and the inside of your mouth to make sure they are healthy.

The dental hygienist provides treatment to prevent tooth decay, such as cleaning, fluoride, and sealants. The dental assistant may help with some of these duties. The dentist will look further and diagnose any problems that need other types of treatment, such as fillings, crowns, root canals, and extractions (pulling problem teeth). The dentist, dental hygienist, or dental assistant may also explain to you how to brush your teeth and eat correctly. They may ask you questions. You can ask the dental team any questions you may have. They are friendly and want to help keep your mouth healthy.

Not everyone visits the dentist or a dental professional in a dental office. You may see trained dental professionals in a mobile van, or at a local community care clinic. They may even visit your school with portable dental equipment. All dental teams have the same goal: to keep you smiling and healthy.

TOOTH TRIVIA

Maybe It Should Be Called The Great Bite Shark

Each Great White shark has several rows of jagged, triangular-shaped teeth—up to 3,000 of them. Whenever a tooth is broken or lost, the one behind it moves forward, so the shark always has a full set of teeth ready for biting. Despite all those teeth, Great White sharks don't chew their food. Instead, they use their teeth to rip off large chunks of meat and swallow it whole.

Source: Delta Dental of New Jersey (2010) Kids Club: Dental Trivia



Tooth Tutor
Class Activities for Early Education
(Pre-K to Kindergarten)

Pre-K: Importance of a Healthy Mouth

Class Activity 1: Why We Have Teeth

Time Needed: 20 minutes

Materials Needed:

Master Copy #1: *Why Do We Have Teeth?*
Parent/Caregiver Information Letter for each student
Unit 1 Teacher Background Information

Objectives for Student Learning

- Understand why we have teeth
- Understand what teeth do

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
What do you know about your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do we have teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we use our teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do our teeth help us eat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Why we have teeth

- Discuss student suggestions.
- Review Unit 1 Teacher Background Information with students. Allow time for discussion.
- Share Master Copy #1: *Why Do We Have Teeth?* and discuss with the class. Emphasis needs to be on talking, eating or chewing, smiling, and singing.
- Ask students to talk, chew, smile, and frown at each other.
- Ask students how teeth help us eat.

What our teeth do

- Do our teeth help us talk?
- Is it easy to talk without using your teeth?
Let's try it. Say "thirty-three thirsty thieves" without letting your tongue touch your teeth. That was very hard to do!
- Our teeth have the important job of helping our lips and tongue make sounds properly.

- Do you think you need your teeth to frown?
Let's test it out. Turn to your neighbor and give a great big smile. Good.
Now, give your neighbor a very unhappy frown. H-m-m-m. I guess you do not need teeth to frown!
However, since most of you laugh and smile a lot, your teeth are very important.
- Our teeth are important because they help us talk properly, chew our food, and give us beautiful smiles.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 1 (Appendix C) to send home with each student.

Closure

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What do you know about your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do we have teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we use our teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do our teeth help us eat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Early Learning & Development Benchmarks

Pre-K, Unit 1: Importance of a Healthy Mouth

This unit meets the following Early Learning and Development Benchmarks:

DOMAIN 1: Physical Well-Being, Health, and Motor Development

Sub-Domain – Motor Development

Fine Motor Skills

Goal 2: Children demonstrate strength and coordination of small motor muscles.

Sub-Domain – Health and Personal Care

Daily Living Skills

Goal 6: Children practice basic personal care routines.

Goal 7: Children demonstrate personal health and hygiene skills.

Nutrition

Goal 8: Children eat a variety of nutritious foods.

Sub-Domain – Safety

Rules and Regulations

Goal 10: Children demonstrate awareness and understanding of safety rules.

DOMAIN 2: Social and Emotional Development

Sub-Domain – Social Development

Interactions with Adults

Goal 11: Children trust and interact comfortably with familiar adults.

Goal 12: Children seek assistance from adults when needed.

Sub-Domain: Social Development

Adaptive Social Behavior

Goal 17: Children participate positively in group activities.

Sub-Domain – Emotional Development

Self-Control

Goal 24: Children understand and follow rules and routines.

Domain 5: Language, Communication, and Literacy

Sub-Domain – Communication

Listening

Goal 63: Children demonstrate an understanding of language by listening.

Sub-Domain – Literacy

Reading

Goal 71: Children demonstrate appreciation and enjoyment of reading.

Early Learning & Development Benchmarks

Master Copy #1

Pre-K: Class Activity 1

Why Do We Have Teeth?

Teeth give us a healthy, balanced face.



Teeth help us eat, bite, and chew.



Teeth are for smiling.



Teeth help us make sounds, speak, and sing.



Pre-K: Tooth Shapes and Functions

Class Activity 2: Functions of Teeth

Time Needed: 30 minutes

Materials Needed:

Book: *The Tooth Book* by Laurie King and Fallon Parrott
or *The Tooth Book* by Dr. Seuss
Colorful paper to create chart recording when children lose their teeth
Master Copy #2: *When Do Baby Teeth Appear?*
Master Copy #3: *Tooth Types*
Parent/Caregiver Information Letter for each student
Unit 2 Teacher Background Information

Objectives for Student Learning

- Understand the functions of teeth
- Understand when teeth appear
- Understand difference between baby teeth and adult teeth

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
What are teeth used for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can you talk without your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do you get your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the difference between baby teeth and adult teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do baby teeth come in?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do babies need teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 2 Teacher Background Information with students. Allow time for discussion.
- Read *The Tooth Book*. Allow time for discussion.
- Use Master Copies as teacher resources.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 2 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are teeth used for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can you talk without your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do you get your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the difference between baby teeth and adult teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do baby teeth come in?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do babies need teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA

Did you know?

Insects have teeth, but they are called fangs or mandibles. Some insects also have teeth in their gizzard to help grind up food.

Source: Delta Dental of New Jersey (2010)
Kids Club: Dental Trivia

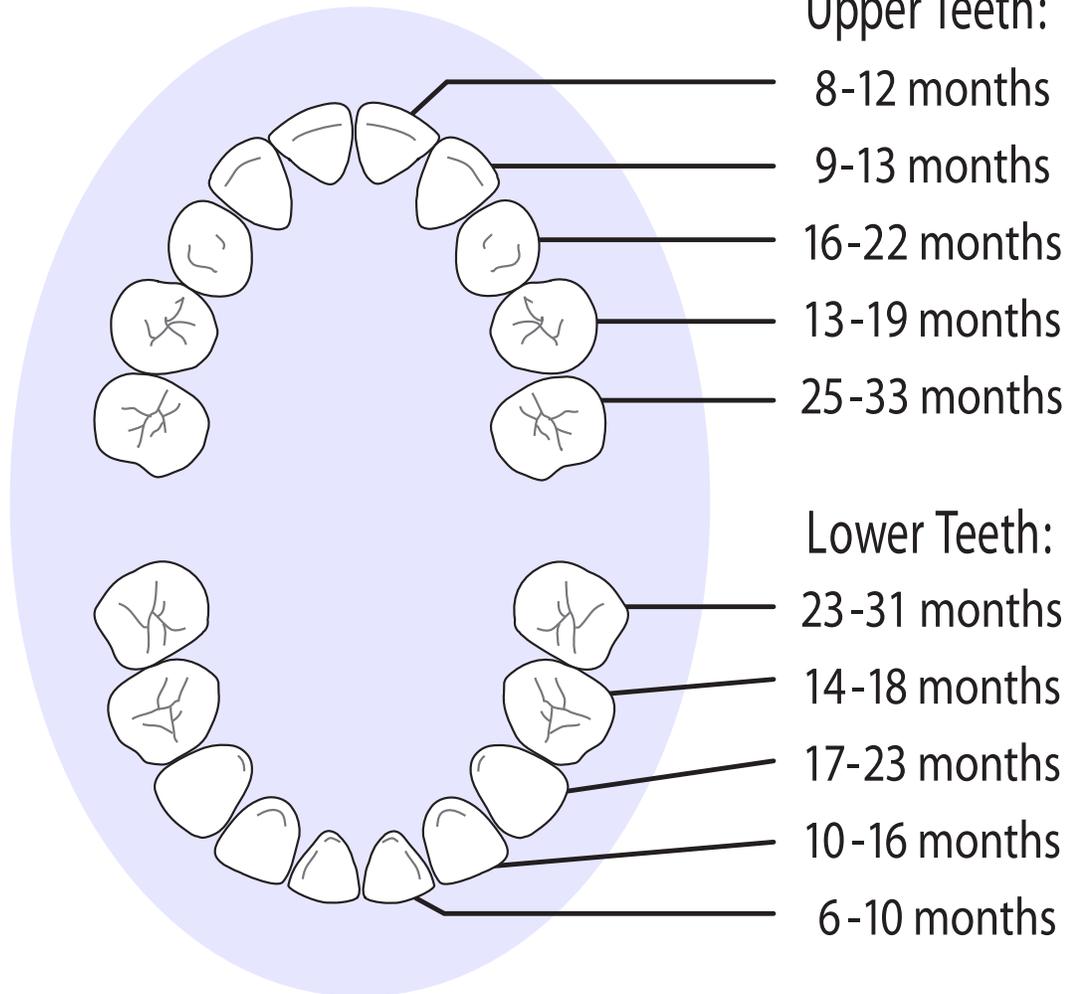


Master Copy #2

Pre-K: Class Activities 2 and 3

When Do Baby Teeth Appear?

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Eruption_Chart_Baby_Teeth.pdf



There are 20 baby teeth, or primary teeth: ten in the upper jaw and ten in the lower.

Healthy baby teeth are important for chewing food, for speaking clearly, for normal jaw growth, and a healthy appearance. But most important, baby teeth keep the spacing for the adult teeth, or permanent teeth. Baby teeth are replaced by permanent teeth as your child gets older. Baby teeth lost early because of tooth decay is the leading cause for crowded and crooked permanent teeth.



NORTH CAROLINA
ORAL HEALTH

State of North Carolina, Beverly Eaves Perdue, Governor - Department of Health and Human Services, Lanier M. Cansler, Secretary
Division of Public Health - Oral Health Section 9/10 www.ncdhhs.gov • www.oralhealth.ncdhhs.gov
NC DHHS is an equal opportunity employer and provider.

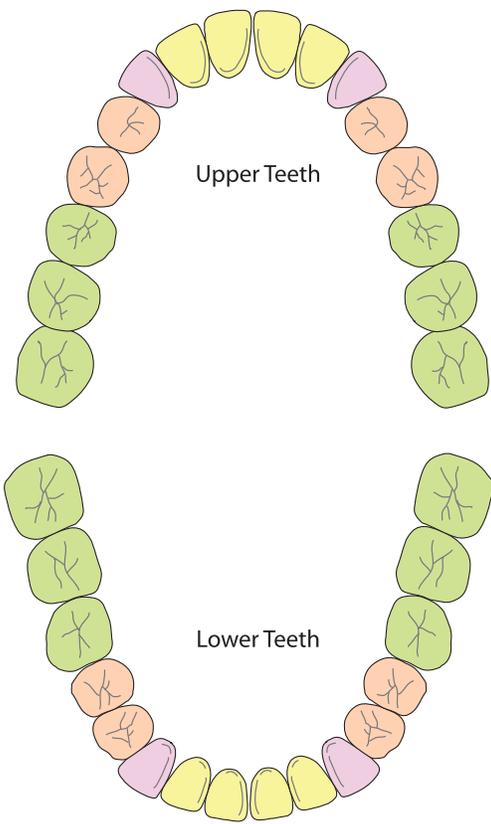
Master Copy #3

Pre-K: Class Activity 2

Tooth Types

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Tooth_Types.pdf

Humans have four types of permanent teeth: incisors, canines, premolars, and molars.



Each tooth type has a special use when we bite and chew food.

Incisors
have a sharp biting surface and are used for cutting food into small chewable pieces

Three incisor teeth are shown: a central incisor and two lateral incisors. They have a sharp, chisel-like biting surface.

Canines
also called cuspids, have a sharp, pointed biting surface to grip and tear food.

Three canine teeth are shown: a central canine and two lateral canines. They have a sharp, pointed biting surface.

Premolars
also called bicuspids, have a flat biting surface used to tear and crush food.

Two premolar teeth are shown: a central premolar and a lateral premolar. They have a flat biting surface.

Molars
are the largest teeth. They have a large flat biting surface to chew, crush and grind food.

Two molar teeth are shown: a central molar and a lateral molar. They have a large, flat biting surface.



State of North Carolina, Beverly Eaves Perdue, Governor - Department of Health and Human Services, Lanier M. Cansler, Secretary
Division of Public Health - Oral Health Section 9/10 www.ncdhhs.gov • www.oralhealth.ncdhhs.gov

Pre-K: Tooth Shapes and Functions

Class Activity 3: Number of Teeth

Time Needed: 20–30 minutes

Materials Needed:

Book: *How Many Teeth?* by Paul Showers
Book: *Arthur's Tooth* by Marc Brown
Ball of string or yarn for stringing baby teeth
Master Copy #30: *Tooth Coloring Page*
Hole punch
Decoration materials (glue, glitter, etc)
Master Copy #2: *When Do Baby Teeth Appear?* (in Activity 2)
Parent/Caregiver Information Letter for each student
Unit 2 Teacher Background Information

Objectives for Student Learning

- Understand the difference between baby teeth and adult teeth
- Identify how many teeth we have
- Understand when they appear

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
Why are teeth important?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What do teeth help us do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What do we use teeth for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do teeth appear?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the difference between baby teeth and adult teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 2 Teacher Background Information with students. Allow time for discussion.
- Read the book *How Many Teeth?*
- Ask students to select a partner, or select one for them.
- Instruct each child to look in their partner's mouth and count how many teeth they have. Students should only count 20 teeth. Allow them to share how many teeth they counted.
- Read the book *Arthur's Tooth*.
- Use Master Copy as teacher resource.

Bulletin Board

- Decorate the board with information on what baby teeth do (smile, chew, talk).
- Make strings of 20 baby teeth.
- Cut out outlines of teeth from Master Copy #30.
- Cut hole in tooth with hole punch (large enough for yarn).
- Use piece of yarn to string teeth together.
- Each child will string together the amount of teeth they counted in their mouth.
- Decorate teeth with materials available (glitter, colors, markers, etc.).
- Place strings of teeth on bulletin board for display.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 2 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

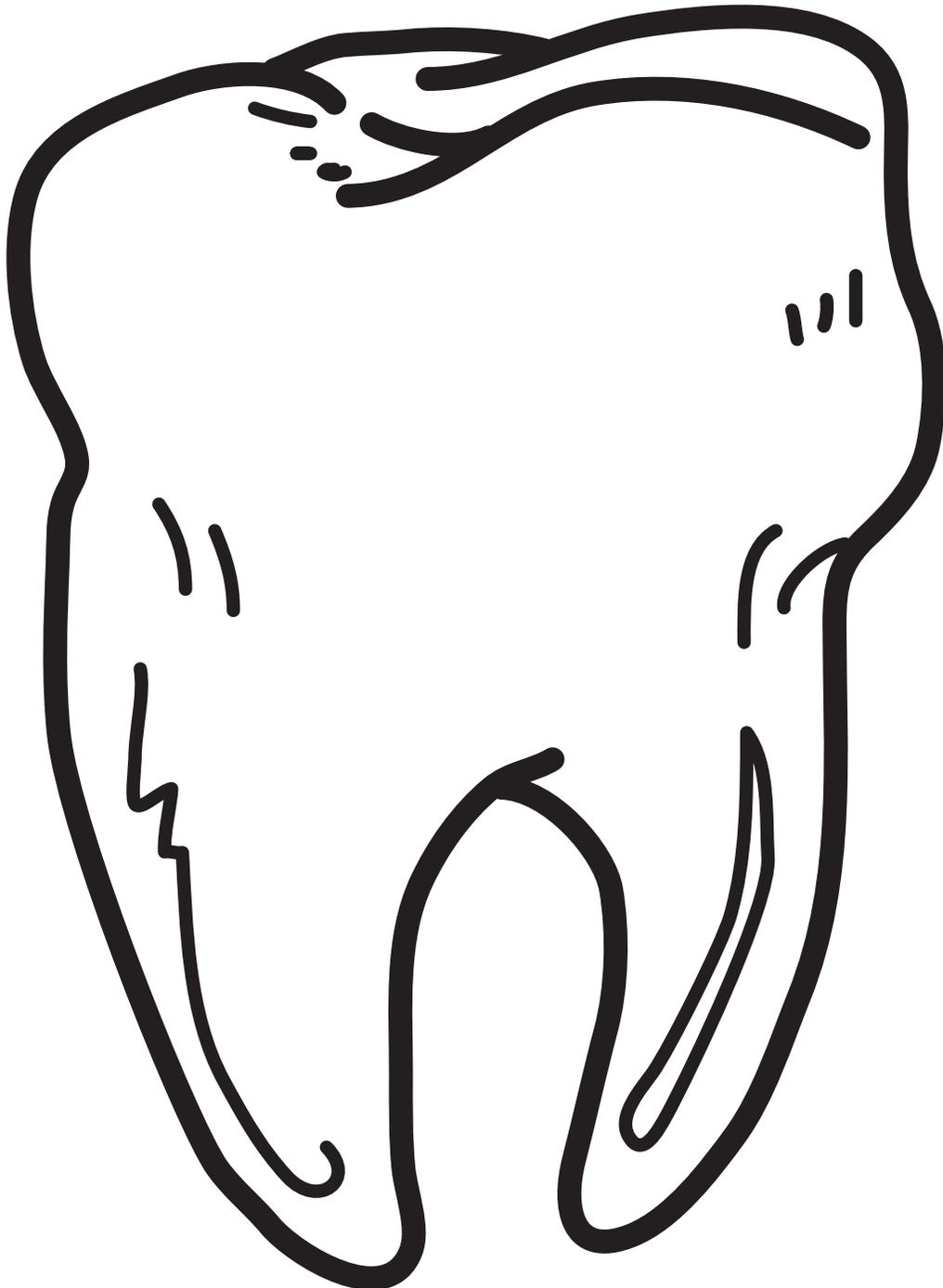
	Poor	Fair	Good
Why are teeth important?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What do teeth help us do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What do we use teeth for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do teeth appear?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the difference between baby teeth and adult teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tooth Coloring Page

www.coloringpagestube.com/index.php?main_page=large_coloring_page&pID=12307&cPath=748_776

Student's name: _____

Dental visits: _____



Pre-K-K: Tooth Shapes and Functions

Class Activity 4: The Loss of Baby Teeth

Time Needed: 15–20 minutes

Materials Needed:

Book: *The Mixed up Tooth Fairy* by Keith Faulkner
Song: *Smile, Talk, and Chew* *
Bulletin Board chart with each child's name and a space to record when they lose a tooth
Parent/Caregiver Information Letter for each student
Unit 2 Teacher Background Information

Objectives for Student Learning

- Understand what happens to baby teeth

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What happens to baby teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 2 Teacher Background Information with students. Allow time for discussion.
- Read the book *The Mixed up Tooth Fairy*.
- Discuss what happens in the story.
- Discuss what happens to the group's baby teeth.
- Allow time for students to share personal stories.
- Sing the song *Smile, Talk, and Chew**. Get the lyrics from:
www.colgate.com/BrightSmilesBrightFutures/US/EN/Teachers/ProgramMaterials/songlyrics.pdf

Lost Tooth Bulletin Board

- Create colorful bulletin board with chart showing when students in the class lose their baby teeth.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 2 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What happens to baby teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Early Learning & Development Benchmarks

Pre-K, Unit 2: Tooth Shapes and Functions

This unit meets the following Early Learning and Development Benchmarks:

DOMAIN 2: Social and Emotional Development

Sub-Domain – Social Development

Interactions with Adults

Goal 12: Children seek assistance from adults when needed

Adaptive Social Behavior

Goal 17: Children participate positively in group activities

Appreciating Diversity

Goal 20: Children recognize, appreciate, and respect similarities and differences in people

DOMAIN 3: Approaches Toward Learning

Sub-Domain – Learning Approaches

Curiosity and Interest

Goal 27: Children are curious and interested in learning new things and having new experiences

Reflection and Interpretation

Goal 31: Children learn from their experiences

DOMAIN 4: Cognition and General Knowledge

Sub-Domain – Logic and Reasoning

Causation

Goal 32: Children demonstrate awareness of cause and effect

Critical and Analytic Thinking

Goal 33: Children compare, contrast, examine, and evaluate experiences, tasks, and events

Sub-Domain – Mathematics and Numeracy

Number Sense and Operations

Goal 38: Children demonstrate knowledge of numbers and counting volume, height, weight, and length

Sub-Domain – Science

Scientific Thinking

Goal 43: Children engage in exploring the natural world by manipulating objects, asking questions, making predictions, and developing generalizations

Sub-Domain – Social Studies

History

Goal 46: Children differentiate between events that happen in the past, present, and future

Sub-Domain – Creative Arts

Expression and Representation

Goal 56: Children use creative arts to express and represent what they know, think, believe, or feel

DOMAIN 5: Language, Communication, and Literacy

Sub-Domain – Literacy

Reading

Goal 71: Children demonstrate appreciation and enjoyment of reading

Early Learning & Development Benchmarks

Pre-K: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 5: Traffic Light Food Game

Time Needed: 1 hour

Materials Needed:

Pictures of main food groups, healthy foods, snacks, beverages
Small and large paper plates
Red, green, and yellow paint, or paper for signs
Glue
Clear contact paper
Master Copy #4: *25 Healthy Snacks for Kids*
Parent/Caregiver Information Letter for each student
Unit 4 Teacher Background Information

Objectives for Student Learning

- Identify healthy snacks and how often to eat them
- Identify unhealthy snacks and how often to eat them

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What do you know about healthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which snacks are good for our health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often do we need to eat healthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which snacks are not good for our health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often should we eat unhealthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 4 Teacher Background Information with students. Allow time for discussion.

Traffic Light Signs

Show students the Traffic Light Signs (on next page). The traffic light system is a fun way to help students choose healthy foods.

- Ask students to identify pictures of food and classify them as either RED (Stop), YELLOW (Think), or GREEN (Go) foods.
- Glue these pictures on small paper plates.
- Paint or color three large paper plates red, yellow, and green.
- Match the small and large plates to help students understand the different types of foods.
 - ♦ **GREEN** light foods are healthy choices and good to eat daily with any meal.
 - ♦ **YELLOW** light foods should be eaten in small amounts because they can cause tooth decay.
 - ♦ **RED** light foods should be avoided or eaten only occasionally because they can cause tooth decay.

- Expand the concept and explain to students that the more times we eat these foods, the more chances for decay.
- Highlight the message that we need to eat nutritional meals and occasional snacks for teeth to stay healthy.
- Use Master Copy as a teacher resource or parent handout.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today’s lesson.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What do you know about healthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which snacks are good for our health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often do we need to eat healthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which snacks are not good for our health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often should we eat unhealthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Traffic Light Food System

RED = STOP

Foods and drinks in this group have too much fat, sugar, or salt. These items give you too much energy and not enough nutrients. Avoid red light foods or eat them only occasionally.

Examples: soda pop, candy, cakes, and cookies.

YELLOW = THINK

Foods and drinks in this group contain some fat, added sugar, or salt. Eat yellow light foods in small amounts.

Examples: juice, dried fruits, sweetened cereals, chips, crackers, and raisins.

GREEN = GO

Foods and drinks in this group are healthy choices, with lots of nutrients and low amounts of fat, added sugar, and salt. Eat green light foods daily and at every meal.

Examples: fruits, vegetables, cheese, whole grains, milk, and water.

Master Copy #4

Pre-K: Class Activities 5 and 7

25 Healthy Snacks for Kids

www.eatright.org/public/content.aspx?id=206

1. Peel a banana and dip it in yogurt. Roll in crushed cereal and freeze.
2. Spread celery sticks with peanut butter or low-fat cream cheese. Top with raisins. Enjoy your “ants on a log.”
3. Stuff a whole-grain pita pocket with ricotta cheese and Granny Smith apple slices. Add a dash of cinnamon.
4. Mix together ready-to-eat cereal, dried fruit and nuts in a sandwich bag for an on-the-go snack.
5. Smear a scoop of frozen yogurt on two graham crackers and add sliced banana to make a yummy sandwich.
6. Top low-fat vanilla yogurt with crunchy granola and sprinkle with blueberries.
7. Microwave a small baked potato. Top with reduced-fat cheddar cheese and salsa.
8. Make snack kabobs. Put cubes of low-fat cheese and grapes on pretzel sticks.
9. Toast a whole grain waffle and top with low-fat yogurt and sliced peaches.
10. Spread peanut butter on apple slices.
11. Blend low-fat milk, frozen strawberries and a banana for thirty seconds for a delicious smoothie.
12. Make a mini-sandwich with tuna or egg salad on a dinner roll.
13. Sprinkle grated Monterey Jack cheese over a corn tortilla; fold in half and microwave for twenty seconds. Top with salsa.
14. Toss dried cranberries and chopped walnuts in instant oatmeal.



continued

15. Mix together peanut butter and cornflakes in a bowl. Shape into balls and roll in crushed graham crackers.
16. Microwave a cup of tomato or vegetable soup and enjoy with whole grain crackers.
17. Fill a waffle cone with cut-up fruit and top with low-fat vanilla yogurt.
18. Sprinkle grated Parmesan cheese on hot popcorn.
19. Banana Split: Top a banana with low-fat vanilla and strawberry frozen yogurt. Sprinkle with your favorite whole-grain cereal.
20. Sandwich Cut-Outs: Make a sandwich on whole grain bread. Cut out your favorite shape using a big cookie cutter. Eat the fun shape and the edges, too!
21. Spread mustard on a flour tortilla. Top with a slice of turkey or ham, low-fat cheese and lettuce. Then roll it up.
22. Mini Pizza: Toast an English muffin, drizzle with pizza sauce and sprinkle with low-fat mozzarella cheese.
23. Rocky Road: Break a graham cracker into bite-size pieces. Add to low-fat chocolate pudding along with a few miniature marshmallows.
24. Inside-Out Sandwich: Spread mustard on a slice of deli turkey. Wrap around a sesame breadstick.
25. Parfait: Layer vanilla yogurt and mandarin oranges or blueberries in a tall glass. Top with a sprinkle of granola.

Now that you are refueled, take a trip to Planet Power. Play the MyPyramid Blast-Off game at www.mypyramid.gov.

Dip it! Bonus Snacks

- Dip baby carrots and cherry tomatoes in low-fat ranch dressing.
- Dip strawberries or apple slices in low-fat yogurt.
- Dip pretzels in mustard.
- Dip pita chips in hummus.
- Dip graham crackers in applesauce.
- Dip baked tortilla chips in bean dip.
- Dip animal crackers in low-fat pudding.
- Dip bread sticks in salsa.
- Dip a granola bar in low-fat yogurt.
- Dip mini-toaster waffles in cinnamon applesauce.

For a referral to a registered dietitian and for additional food and nutrition information visit www.eatright.org.



The American Dietetic Association is the world's largest organization of food and nutrition professionals. ADA is committed to improving the nation's health and advancing the profession of dietetics through research, education and advocacy.

This tip sheet is provided by:

Authored by American Dietetic Association staff registered dietitians.

Pre-K: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 6: Healthy Food Bulletin Board

Time Needed: 40–50 minutes

Materials Needed:

- Pictures of healthy foods and unhealthy foods
- Pictures of smiling teeth and faces
- Pictures of non-smiling teeth and faces
- Parent/Caregiver Information Letter for each student
- Unit 4 Teacher Background Information

Objectives for Student Learning

- Understand and identify healthy foods
- Understand and identify unhealthy foods

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What is the difference between healthy and unhealthy foods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often should you eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often should you eat foods that are not healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens to your teeth and smile when you eat unhealthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens to your teeth and smile when you eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Healthy Food Bulletin Board

- Review Unit 4 Teacher Background Information regarding healthy foods with students. Allow time for discussion.
- Review previous activities and discussions regarding healthy foods and unhealthy foods.
- Discuss the Traffic Light food groups (healthy and unhealthy foods).
- Show pictures of different foods and ask students to identify them as healthy or unhealthy.
- Share pictures of smiling mouths and non-smiling mouths.
- Ask students to match the healthy foods with smiling mouths and unhealthy food with non-smiling mouths.
- Discuss the concept that unhealthy foods lead to unhealthy mouths.
- Create a section on the bulletin board to place healthy and unhealthy foods.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today's lesson.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

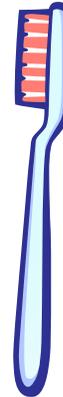
	Poor	Fair	Good
What is the difference between healthy and unhealthy foods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often should you eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often should you eat foods that are not healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens to your teeth and smile when you eat unhealthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens to your teeth and smile when you eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA

Did you know?

Giraffes have 32 permanent teeth, the same as humans. Their teeth can measure 17 inches long.

Source: Delta Dental of New Jersey (2010)
Kids Club: Dental Trivia



Pre-K: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 7: Food Placemats

Time Needed: 30–45 minutes

Materials Needed:

- Pictures of fruits and vegetables
- Paste, glue, or tape
- Legal size cardstock or stiff paper
- Clear contact paper
- Master Copy #4: *25 Healthy Snacks for Kids* (in Activity 5)
- Parent/Caregiver Information Letter for each student
- Unit 4 Teacher Background Information

Objectives for Student Learning

- Identify healthy foods
- Understand why it is important to eat healthy foods

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What kinds of food are healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why is it important to eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens to our teeth when we do not eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 4 Teacher Background Information with students. Allow time for discussion.

Healthy Food Placemats

- Show pictures of healthy foods (fruits, vegetables, milk and cheese, peanut butter, meats, and popcorn).
- Show students how to paste, glue, or tape pictures of foods on to legal-size cardstock or stiff paper.
- Discuss with students the importance of eating healthy foods in order to have healthy teeth (from Class Activity 6).
- Laminate student's work with clear contact paper to look like placemats.
- Use placemats at meals and snacks.
- Encourage students to eat healthy snacks (see Master Copy #4 in Activity 5).

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today's lesson.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What kinds of food are healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why is it important to eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens to our teeth when we do not eat healthy food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Early Learning & Development Benchmarks

Pre-K, Unit 4: Preventing Tooth Decay – Nutrition

This unit meets the following Early Learning and Development Benchmarks:

DOMAIN 1: Physical Well-Being, Health, and Motor Development

Sub-Domain – Health and Personal Care

Daily Living Skills

Goal 7: Children demonstrate personal health and hygiene skills.

Goal 8: Children eat a variety of nutritious foods.

DOMAIN 2: Social and Emotional Development

Sub-Domain – Social Development

Interaction with Peers

Goal 12: Children seek assistance from adults when needed.

Sub-Domain – Social Development

Adaptive Social Behavior

Goal 16: Children demonstrate awareness of behavior and its effects.

Goal 17: Children participate positively in group activities.

Sub-Domain – Emotional Development

Self Control

Goal 24: Children understand and follow rules and routines.

Goal 25: Children regulate their feelings and impulses.

DOMAIN 3: Approaches Toward Learning

Sub-Domain – Learning Approaches

Curiosity and Interest

Goal 27: Children are curious about and interested in learning new things and having new experiences.

DOMAIN 4: Cognition and General Knowledge

Sub-Domain – Logic and Reasoning

Causation

Goal 32: Children demonstrate awareness of cause and effect.

Goal 33: Children compare, contrast, examine, and evaluate experiences, tasks, and events.

Representational Thought

Goal 36: Children use symbols to represent objects.

Sub-Domain – Mathematics and Numeracy

Properties of Ordering

Goal 40: Children identify and label shapes.

Goal 41: Children sort, classify, and organize objects.

Early Learning & Development Benchmarks

Pre-K: Oral Hygiene – Tooth Brushing and Flossing

Class Activity 8: How and When to Brush

Time Needed: 1 hour

Materials Needed:

One large mouth model and one large toothbrush*
Age and size appropriate toothbrush for each child*
Brush Your Teeth – Singable Songs for the Very Young by Raffi
Master Copy #5: *How to Brush Your Teeth*
Dolls or puppets for students to practice tooth brushing
Individual toothbrush for each student
Tube of fluoridated toothpaste
Paper plate and paper cup for toothpaste and water
Napkins for wiping student’s mouth out
Parent/Caregiver Information Letter for each student
Unit 5 Teacher Background Information

Objectives for Student Learning

Understand how to brush teeth
Understand when to brush teeth

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
When do you need to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often do you need to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a specific way we should brush our teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What kind of toothpaste do we need to use when brushing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much toothpaste do you use when brushing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 5 Teacher Background Information with students. Allow time for discussion.
- Share Master Copy #5 *How to Brush Your Teeth*. Remind the group that one of the ways we keep our teeth healthy and clean is to brush twice a day. Brush **after** breakfast and before going to bed at night.
- Show the group how to brush their teeth using a mouth model. Keep it simple. Explain the brushing technique as follows:
 - ◆ Brush in a pattern (circular or vertical).
 - ◆ Start with the top teeth, using small controlled circles.
 - ◆ Brush the outside of the top teeth and gum line: left side, front, right side.

- ◆ Brush the inside of the top teeth and gum line: left side, front, right side.
 - ◆ Move to the bottom teeth: same pattern.
 - ◆ Outside the bottom teeth: left, front, right.
 - ◆ Inside (tongue-side) of bottom teeth and gum line: left, front, right.
 - ◆ Chewing side of the top teeth and gum line: left, right.
 - ◆ Chewing side of the bottom teeth and gum line: left, right.
 - ◆ Brush the tongue in big circles.
- Hand out tooth model, dolls or puppets for students to practice on.
 - Encourage students to brush teeth in a pattern.
 - Side coach students to brush correctly.

Listen to *Brush Your Teeth*

- Play the song about brushing during tooth brushing time to establish the routine – two minutes.
- Play the song every time students brush.

Toothbrushes and toothpaste

- Supervise or distribute toothbrushes so that students will not use another child’s toothbrush.
- Distribute or collect the brushes, touching only the handle of the brush.
- Wash hands before and after handling the toothbrushes.
- Use fluoride toothpaste with the Seal of Acceptance by the American Dental Association (ADA) available in any grocery store. Any flavor of fluoride toothpaste that encourages students to brush is acceptable.
- Health authorities recommend a single tube of toothpaste for use in childcare as long as the toothpaste is not distributed from the tube to the brush, as the tube would become contaminated.
- Put no more than a pea-size amount of toothpaste around the edge of a paper plate (or other surface) so each child can “scoop” the right amount onto the brush.
- **Model brushing:** Students learn what they see. If you find tooth brushing important, students will too. Brush **your** teeth while students brush theirs. Use a large toothbrush model to demonstrate the technique while the students watch.
- **Spit the toothpaste:** Young students have difficulty spitting. Practice using two cups, one with a little water. If students have difficulty spitting, use less toothpaste. Students can wipe their mouth with a napkin and put the napkin in the cup before throwing it away.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 5 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
When do you need to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often do you need to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a specific way we should brush our teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What kind of toothpaste do we need to use when brushing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much toothpaste do you use when brushing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Contact a local dental office or the County Health Department to ask whether they can help you find one.

Master Copy #5

Pre-K: Class Activity 8

How to Brush Your Teeth

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/How_to_Brush_letter_English.pdf



Brush carefully for 3 to 5 minutes to remove plaque and food particles and keep your teeth and gums healthy.

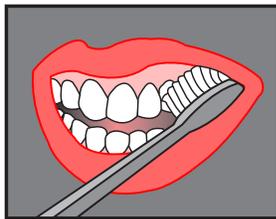
How to Brush Your Teeth



A smear of toothpaste is all you need to keep your teeth and gums clean and healthy.

1

Place the bristles at a 45 degree angle to the teeth. Slide the tips of the brush bristles under the gums.



2

Jiggle the bristles gently in small circles so that any plaque under the gum will be removed.



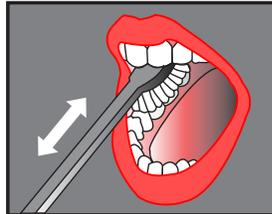
3

Be sure to brush both the outside and the tongue side of your teeth.



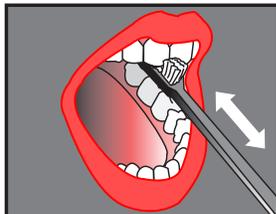
4

Brush the chewing surfaces of your teeth with a back and forth motion.



5

Brush the tongue side of your front teeth with the end of the brush, cleaning one tooth at a time.



6

Brush your tongue to remove germs and to make your breath fresh.



NORTH CAROLINA
ORAL HEALTH

State of North Carolina, Beverly Eaves Perdue, Governor - Department of Health and Human Services, Lanier M. Cansler, Secretary
Division of Public Health - Oral Health Section 9/10 www.ncdhhs.gov • www.oralhealth.ncdhhs.gov

Pre-K: Oral Hygiene – Tooth Brushing and Flossing

Class Activity 9: How to Take Care of Toothbrushes

Time Needed: 1 hour

Materials Needed:

Song: *Brush Your Teeth*

Individual toothbrush for each student

Tube of fluoridated toothpaste

Paper plate and paper cup for toothpaste and water

Napkins for wiping student’s mouth out

Master Copy #6: *How to Take Care of My Toothbrush*

Parent/Caregiver Information Letter for each student

Unit 5 Teacher Background Information

Objectives for Student Learning

- Understand how to care for a toothbrush
- Demonstrate how to care for a toothbrush at school

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
Do you care for your toothbrush at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What kind of toothpaste should you use to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where do you keep your toothbrush at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have special instructions for brushing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many minutes should you brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 5 Teacher Background Information with students. Allow time for discussion.
- Review information from Master Copy #6 *How to Take Care of My Toothbrush*, and explain to students the following:
 - ◆ Rinse toothbrush bristles after every use to remove food and bacteria.
 - ◆ Store the toothbrush where it can dry completely, not touching other toothbrushes.
 - ◆ Never share your toothbrush with anyone.
 - ◆ Get a new toothbrush when the bristles wear down or after an illness.
 - ◆ Rinse the brush with clean water. Rinse brushes in a manner that will keep each student’s toothbrush from splashing on another student’s toothbrush. Do not put brushes in a pile!

- Two acceptable methods to rinse toothbrushes include:

Rinse at sink:

- ◆ Rinse the brush and handle under running water before putting it away.
- ◆ Have each student put their toothbrush away and have the teacher or aide rinse the brush later.
- ◆ Rinse brushes one at a time.

Rinse in a cup:

- ◆ Give students a cup of water to rinse the brush to minimize splashing.
- ◆ Wash reusable cups in the dishwasher.
- ◆ Throw away disposable cups.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 5 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
Do you care for your toothbrush at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What kind of toothpaste should you use to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where do you keep your toothbrush at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have special instructions for brushing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many minutes should you brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Master Copy #6

Pre-K: Class Activity 9

How to Take Care of My Toothbrush

www.cdc.gov/OralHealth/infectioncontrol/factsheets/toothbrushes.htm

- Do not share toothbrushes. The exchange of body fluids that such sharing would foster places toothbrush sharers at an increased risk for infections, a particularly important consideration for persons with compromised immune systems or infectious diseases.
- After brushing, rinse your toothbrush thoroughly with tap water to ensure the removal of toothpaste and debris, allow it to air-dry, and store it in an upright position. If multiple brushes are stored in the same holder, do not allow them to contact each other.
- It is not necessary to soak toothbrushes in disinfecting solutions or mouthwash. This practice actually may lead to cross-contamination of toothbrushes if the same disinfectant solution is used over a period of time or by multiple users.
- It is also unnecessary to use dishwashers, microwaves, or ultraviolet devices to disinfect toothbrushes. These measures may damage the toothbrush.
- Do not routinely cover toothbrushes or store them in closed containers. Such conditions (a humid environment) are more conducive to bacterial growth than the open air.
- Replace your toothbrush every 3–4 months, or sooner if the bristles appear worn or splayed. This recommendation of the American Dental Association is based on the expected wear of the toothbrush and its subsequent loss of mechanical effectiveness, not on its bacterial contamination.

A decision to purchase or use products for toothbrush disinfection requires careful consideration, as the scientific literature does not support this practice at the present time.

Source: Centers for Disease Control and Prevention, Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion. Recommended Toothbrush Care.

Pre-K: Oral Hygiene – Tooth Brushing and Flossing

Class Activity 10: Flossing

Time Needed: 30 minutes

Materials Needed:

- Large Tooth Model*
- A 6-foot length of bright yarn or rope
- Master Copy #11: *How to Floss* (one per student)
- Parent/Caregiver Information Letter for each student
- Unit 5 Teacher Background Information

Objectives for Student Learning

- Understand the purpose of flossing
- Demonstrate correct way to floss teeth
- Understand how often to floss

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
How often should you floss?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does tooth brushing alone clean all surfaces of your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it easy to floss?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 5 Teacher Background Information with students. Allow for discussion.
- Using the tooth model, show students the different shapes of the teeth. Point out the six-year molar. Show that there are spaces between the teeth where food catches and bacteria can grow. Flossing between teeth can remove food from the spaces and prevent decay.
- Select five students to act out the method of flossing:
 - ♦ Three students stand side-by-side, close together. They mimic teeth in the mouth.
 - ♦ Two different students act as the “finger.” They hold and move the floss or rope.
 - ♦ One student stands behind the “teeth.” This student holds one end of the rope. Another student stands in front of the row of three “teeth” holding the other end of the rope.
 - ♦ Read aloud the instructions on the Master Copy #11: *How to Floss*. Starting with item #2, have the designated students perform flossing.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 5 (Appendix C) to send home with each student.

* Available from a local dental office or the local health department.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
How often should you floss?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does tooth brushing alone clean all surfaces of your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it easy to floss?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Early Learning & Development Benchmarks

Pre-K, Unit 5: Oral Hygiene – Tooth Brushing and Flossing

This unit meets the following Early Learning and Development Benchmarks:

DOMAIN 1: Physical Well-Being, Health, and Motor Development

Sub-Domain – Motor Development

Fine Motor Skills

Goal 2: Children demonstrate strength and coordination of small muscles.

Sensorimotor Skills

Goal 3: Children use their senses (sight, hearing, smell, taste, and touch) to guide motions.

Sub-Domain – Health and Personal Care

Daily Living Skills

Goal 6: Children practice personal care routines.

Goal 7: Children demonstrate personal health and hygiene skills.

Sub-Domain – Safety

Rules and Regulations

Goal 10: Children demonstrate awareness and understanding of safety rules.

DOMAIN 2: Social and Emotional Development

Sub-Domain – Social Development

Interactions with Adults

Goal 11: Children trust and interact comfortably with familiar adults.

Goal 12: Children seek assistance from adults when needed.

Interactions with Peers

Goal 14: Children cooperate with peers.

Adaptive Social Behavior

Goal 17: Children participate in group activities.

Sub-Domain – Emotional Development

Self-Control

Goal 24: Children understand and follow rules and routines.

DOMAIN 3: Approaches Toward Learning

Sub-Domain – Learning Approaches

Curiosity and Interest

Goal 27: Children are curious about and interested in learning new things and having new experiences.

Persistence and Attention

Goal 29: Children sustain attention to tasks and persist when facing challenges.

Creativity and Inventiveness

Goal 30: Children approach daily activities with creativity and inventiveness.

Reflection and Interpretation

Goal 31: Children learn from their experiences.

DOMAIN 4: Cognition and General Knowledge

Sub-Domain – Logic and Reasoning

Problem Solving

Goal 35: Children find multiple solutions to questions, tasks, problems, and challenges.

Sub-Domain – Mathematics and Numeracy

Measurement

Goal 39: Children demonstrate knowledge of size, volume, height, weight, and length.

Sub-Domain – Science

Scientific Thinking

Goal 42: Children collect information through observation and manipulation.

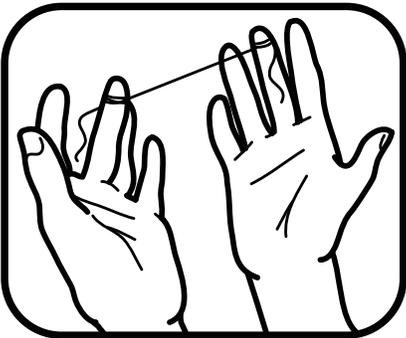
Early Learning & Development Benchmarks

Master Copy #11

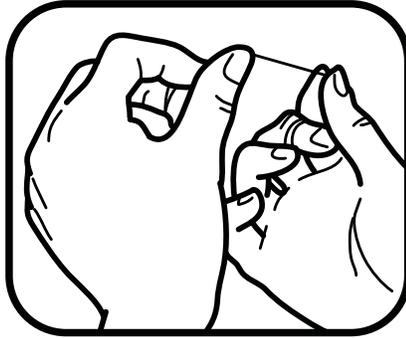
Pre-K: Class Activity 10

How to Floss

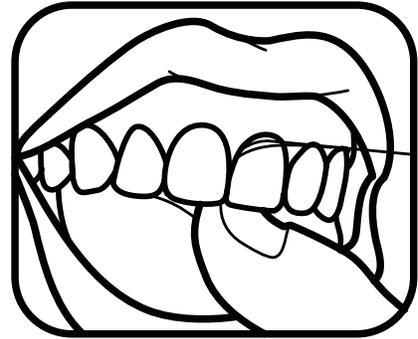
www.ada.org/sections/professionalResources/pdfs/activity_how_to_floss.pdf



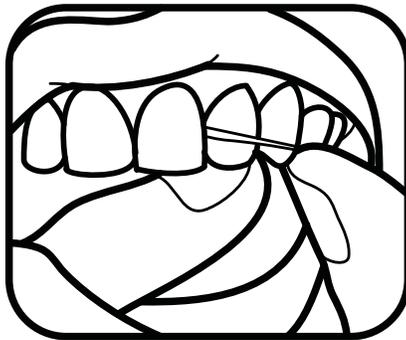
1. Use about 18 inches of floss wound around one of your middle fingers, with the rest wound around the opposite middle finger.



2. Hold the floss tightly between the thumbs and forefingers and gently insert it between the teeth.



3. Curve the floss into a "C" shape against the side of the tooth.



4. Rub the floss gently up and down, keeping it pressed against the tooth. Don't jerk or snap the floss.



5. Floss all your teeth. Don't forget to floss behind your back teeth.

Pre-K: Injury Prevention

Class Activity 11: Classroom Safety

Time Needed: 20–30 minutes

Materials Needed:

Book: *Home Safety (Adventures in the Roo World: Young Roo Series No. 4)* by Pati Myers Gross
Master Copy #7: *Play It Safe with Your Teeth*
Master Copy #8: *Play Safe Every Day* (2 coloring pages)
Master Copy #9: *First Aid for Dental Emergencies*
Parent/Caregiver Information Letter for each student
Unit 7 Teacher Background Information

Objectives for Student Learning

- Understand the need for safety rules in the classroom
- Identify classroom safety rules

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
Describe the safety rules for the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we stay safe in the classroom?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we stay safe on the playground?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 7 Teacher Background Information with students. Allow for discussion.
- Review classroom rules and discuss how rules keep teeth safe.
- Post classroom rules and direct students to their location. Make sure rules are clearly visible to all staff and students.
- Read the book *Home Safety*. Allow time for discussion.
- Review and verbally share Master Copy #7: *Play It Safe with Your Teeth*.
- Ask students to participate by answering the “Stop and Think – Always or Never?” section of the Master Copy. (Class can raise hands to answer or answer out loud as a group.)
- Distribute Master Copy #8: *Play Safe Every Day* (2 coloring pages) to students for coloring class activity.
- Discuss each coloring page and the message with class.
- Collect completed coloring pages and display on bulletin board.
- Review Master Copy #9: *First Aid for Dental Emergencies*. Post in classroom or use as parent handout.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 7 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
Describe the safety rules for the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we stay safe in the classroom?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we stay safe on the playground?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA

Did you know?

A pair of tusks from an African elephant can weigh 465 pounds. Each of its molars can weigh 12 pounds. The tusks of the extinct straight-tusked elephant measured 16¹/₂ feet long.

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia



Master Copy #7

Pre-K: Class Activities 11 and 13

Play It Safe With Your Teeth

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Play_It_Safe_With_Your_Teeth.pdf

Play it Safe
With Your
Teeth



It is important to protect your teeth when you're playing and having fun. It's not fun to chip a tooth, or lose a tooth. It's even worse to chip or lose more than one tooth.

Everyone knows we use our teeth for chewing food. We also use teeth to speak clearly. Our smile makes us special so we need to protect it. Don't take any risks playing when it is unsafe.

The best way to protect your teeth when playing sports is to use a mouthguard. Protect your face and head with a helmet.

Stop and think before you do something that might injure you or someone else. Don't take a chance and spoil the fun with an injury.

Stop and Think - Always or Never?

Read the sentences below and ask: "What would be the safest thing to do?"
Fill in the blank to begin each sentence with either "Always" or "Never"

1. _____ push or trip anyone on the steps.
2. _____ ride your bicycle on wet leaves or slippery roads.
3. _____ control your speed on skates, rollerblades, or bicycles.
4. _____ trip or push anyone when they are running.
5. _____ run or chase anyone near the swimming pool.
6. _____ remain seated while swinging - NO standing or jumping.
7. _____ walk near or under a moving swing.
8. _____ push someone when they are drinking at a water fountain.
9. _____ be sure there is an adult nearby when climbing trees.
10. _____ rollerblade or skateboard on busy streets or sidewalks.
11. _____ use the ladder when climbing out of a swimming pool.
12. _____ wear a helmet and mouthguard when playing sports.
13. _____ wear a helmet and obey traffic laws when riding your bicycle.
14. _____ wear your lap belt and shoulder belt in the car.

KEY:
1. Never
2. Never
3. Always
4. Never
5. Never
6. Always
7. Never
8. Never
9. Always
10. Never
11. Always
12. Always
13. Always
14. Always

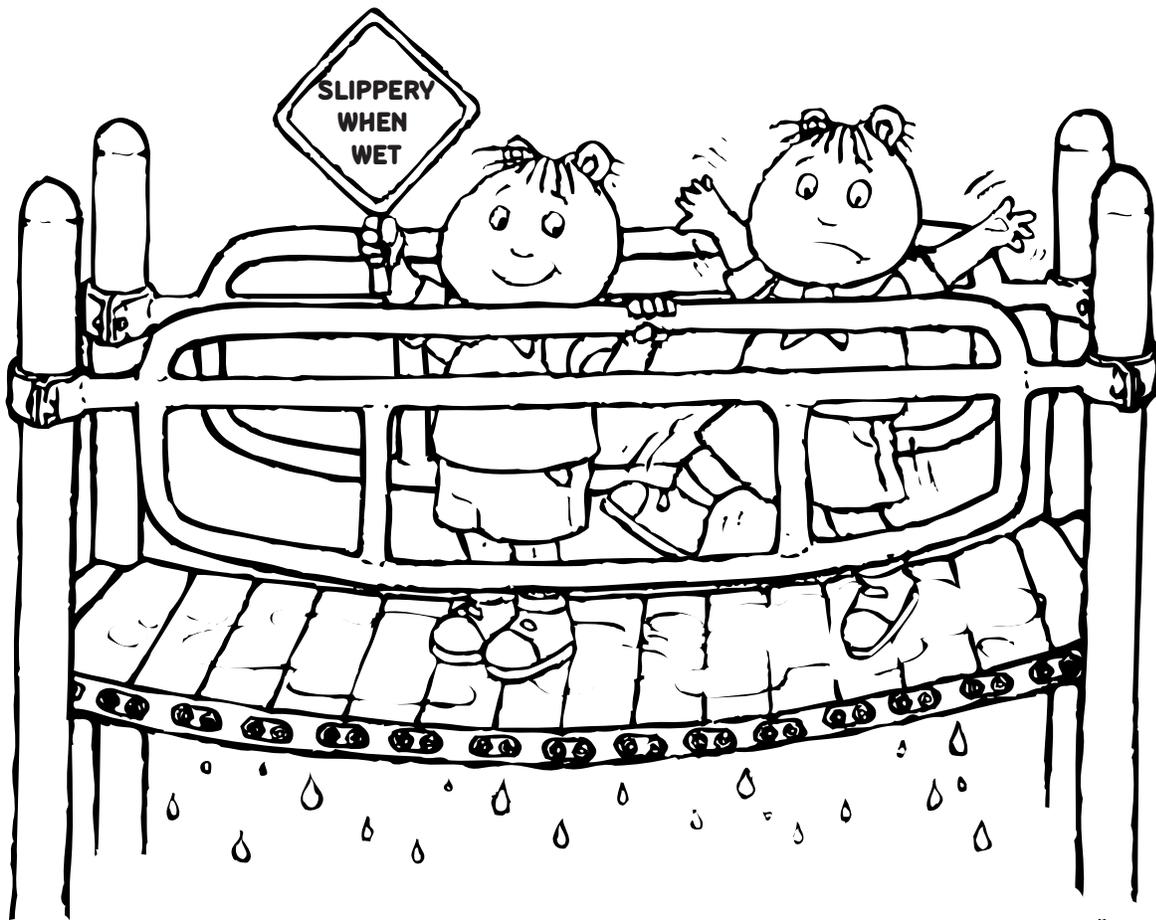
Master Copy #8

Pre-K: Class Activities 11 and 13

Play Safe Every Day

www.healthyschoolsms.org/health_education/documents/playsafe.pdf

Tommy and Timmy together:
"Slow down when things get wet!"



**WATCH OUT FOR
WET SURFACES.**

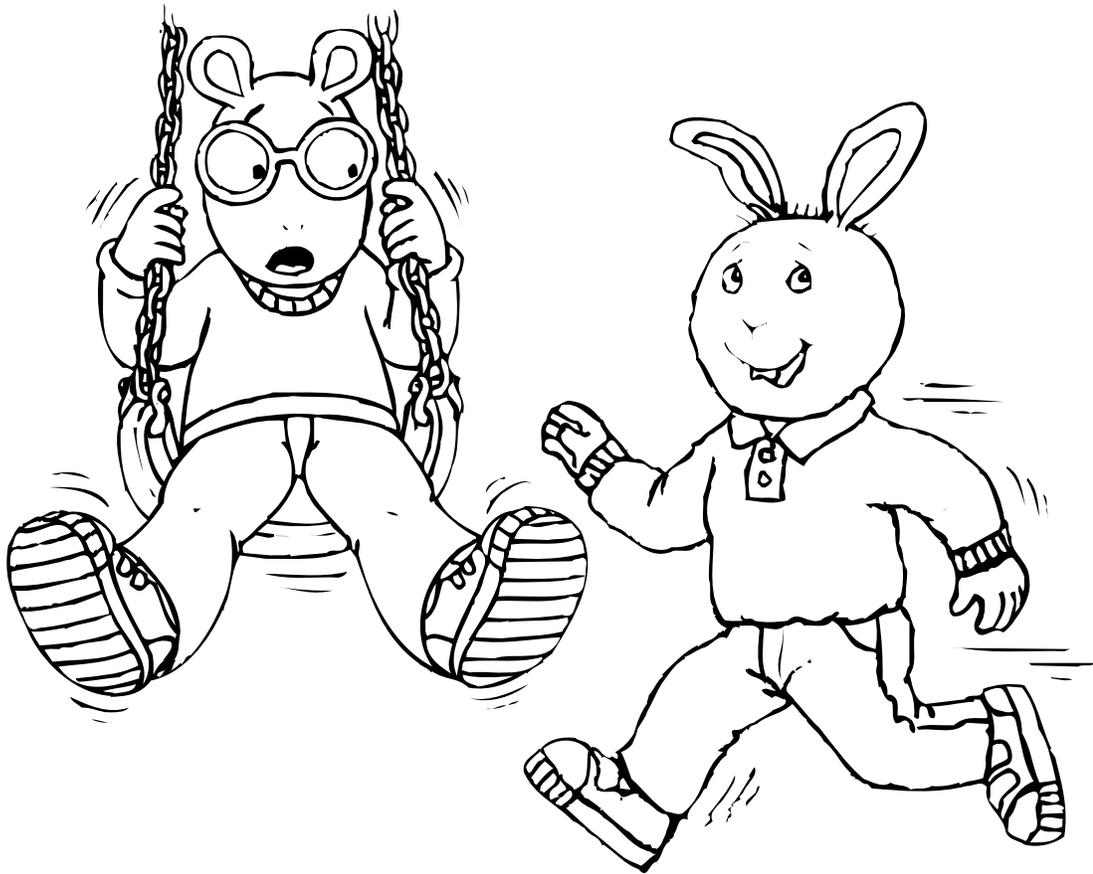
Master Copy #8

Pre-K: Class Activities 11 and 13

Play Safe Every Day

www.healthyschoolsms.org/health_education/documents/playsafe.pdf

Arthur warns:
"Watch out, Buster!"



**KEEP CLEAR OF
MOVING THINGS.**

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First Aid for Dental Emergencies

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/First_Aid_for_Dental_Emergencies_tabloid.pdf

Follow the instructions below when a child has a dental emergency.

- ★ In all situations, reassure the child.
- ★ If any blood is involved, it is recommended that you wear gloves.
- ★ Do not administer any pain relievers until the child's parent is consulted.

BLEEDING AFTER LOSING A BABY TOOTH

- ✓ Place a clean folded gauze pad, cloth or paper towel over the bleeding area.
- ✓ Have the child bite on the gauze with pressure for 15 minutes. This procedure may be repeated.
- ✓ Make sure the child refrains from frequent rinsing.
- ✓ If bleeding persists, SEE A DENTIST !

BROKEN BRACES AND WIRES

- ✓ Broken wires can be covered with wax or gauze until the child can be seen by an orthodontist.
- ✓ DO NOT remove wire embedded in the cheek, tongue or gums.
- ✓ THE CHILD SHOULD SEE THEIR ORTHODONTIST IMMEDIATELY !

BROKEN TOOTH

- ✓ Gently clean dirt from the injured area with warm water.
- ✓ Place a cold compress on the face over the injured area.
- ✓ Locate and save any broken tooth fragments if possible.
- ✓ SEE A DENTIST IMMEDIATELY !

CUT OR BITTEN TONGUE, LIP OR CHEEK

- ✓ Clean area with a clean, wet cloth.
- ✓ Apply pressure with cloth to stop the bleeding.
- ✓ Apply ice to the swollen or bruised areas. If bleeding does not stop after 15 minutes, or with pressure, the child should be seen by a dentist or doctor.

KNOCKED OUT PERMANENT TOOTH

- ✓ Find the tooth.
- ✓ Handle the tooth by its crown, not the root!
- ✓ Gently replace the tooth in its socket and hold the tooth in place.
- ✓ A tooth that is quickly reimplanted has a good chance of being saved!
- ✓ If the tooth cannot be reinserted into the socket, put the tooth into "Sav-A-Tooth", or a cup of fresh milk. Do not put the tooth into tap water.
- ✓ SEE A DENTIST IMMEDIATELY !

POSSIBLE BROKEN JAW

- ✓ The child's jaw line may appear distorted.
- ✓ Immediately call your local emergency medical service (911)!
- ✓ Keep the child still and calm.
- ✓ Make sure the child can breathe.
- ✓ Try to keep the child from moving.

TOOTHACHE OR ABSCESS

- ✓ Rinse the mouth vigorously with warm salt water to remove any food debris.
- ✓ DO NOT place aspirin on the site of the toothache because it may cause burning to the gum tissue. If the face is swollen, place a cold compress on the outside of the cheek.
- ✓ Encourage the parent to take the child to the dentist AS SOON AS POSSIBLE.



Pre-K: Injury Prevention

Class Activity 12: Outdoor Safety

Time Needed: 30–40 minutes

Materials Needed:

Book: *Safety on the Playground* by Lucia Raatma
Book: *Taking Turns* by Janine Amos and Annabel Spenceley
Parent/Caregiver Information Letter for each student
Unit 7 Teacher Background Information

Objectives for Student Learning

- Understand the need for outdoor safety rules
- Identify appropriate outdoor safety rules

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What are some outdoor safety rules?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we stay safe when playing outside?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do you wear a seat belt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When is it good to wear a helmet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 7 Teacher Background Information with students. Allow time for discussion.
- Read the book *Safety on the Playground*.
- Discuss with the class the need for safety rules on the playground.
- Allow time for students to comment on the story or share experiences of playground emergencies.
- Read book *Taking Turns*.
- Discuss with the class the importance of taking turns and playing safely.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 7 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are some outdoor safety rules?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we stay safe when playing outside?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do you wear a seat belt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When is it good to wear a helmet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA

Did you know?

A hippo is capable of biting a small boat in half with its sharp, 20 inch-long teeth!

Source: Delta Dental of New Jersey (2010)
Kids Club: Dental Trivia



Pre-K: Injury Prevention

Class Activity 13: Safety at Home

Time Needed: 15–20 minutes

Materials Needed:

Book: *I Can Be Safe: A First Look at Safety* by Pat Thomas and Leslie Harker
Master Copy #7: *Play It Safe With Your Teeth* (in Activity 11)
Master Copy #8: *Play Safe Every Day* (2 coloring pages) (in Activity 11)
Parent/Caregiver Information Letter for each student
Unit 7 Teacher Background Information

Objectives for Student Learning

- Understand the need for safety rules at home
- Identify appropriate safety rules for home

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What are some outdoor safety rules?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do we need safety rules at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 7 Teacher Background Information with students. Allow time for discussion.
- Read the book *I Can Be Safe: A First Look at Safety*.
- Discuss the story. Allow time for students to share personal safety stories from home.
- Review the Master Copy: *Play It Safe With Your Teeth*, and ask students to help you answer the safety questions.
- Distribute the Master Copy: *Play Safe Every Day* coloring pages, and ask students to think about the safety messages while they color the illustrations.
- Collect the coloring pages when students are finished and post them on the bulletin board.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 7 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are some outdoor safety rules?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do we need safety rules at home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Early Learning & Development Benchmarks

Pre-K, Unit 7: Injury Prevention

This unit meets the following Early Learning and Development Benchmarks:

DOMAIN 1: Physical Well-Being, Health, and Motor Development

Sub-Domain – Motor Development

Fine Motor Skills

Goal 2: Children demonstrate strength and coordination of small motor muscles.

Sensorimotor Skills

Goal 3: Children use their senses (sight, hearing, smell, taste, and touch) to guide motions.

Sub-Domain – Health and Personal Care

Daily Living Skills

Goal 6: Children practice basic personal care routines.

Goal 7: Children demonstrate personal health and hygiene skills.

Sub-Domain – Safety

Safe Practices

Goal 9: Children demonstrate knowledge about and avoid harmful objects and situations.

Rules and Regulations

Goal 10: Children demonstrate awareness and understanding of safety rules.

DOMAIN 2: Social and Emotional Development

Sub-Domain – Social Development

Interactions with Adults

Goal 11: Children trust and interact comfortably with familiar adults.

Goal 12: Children seek assistance from adults when needed.

Goal 14: Children cooperate with peers.

Adaptive Social Behavior

Goal 16: Children demonstrate awareness of behavior and its effects.

Sub-Domain – Emotional Development

Self-Control

Goal 24: Children understand and follow rules and routines.

DOMAIN 4: Cognition and General Knowledge

Sub-Domain – Family, Community, and Culture

Community

Goal 54: Children demonstrates civic responsibility.

DOMAIN 5: Language, Communication, and Literacy

Sub-Domain – Language

Expressive/Oral Language

Goal 62: Children use language for a variety of purposes.

Listening

Goal 63: Children demonstrate an understanding of language by listening.

Oral and Written Communication

Goal 64: Children communicate effectively.

Sub-Domain – Literacy

Reading

Goal 70: Children demonstrate awareness that written materials can be used for a variety of purposes.

Goal 71: Children demonstrate appreciation and enjoyment of reading.

Early Learning & Development Benchmarks

Pre-K: Visiting the Dental Office

Class Activity 14: The Dentist

Time Needed: 30–45 minutes

Materials Needed:

Book: *A Visit to the Dentist* by Eleanor Fremont and Andy Mastrocinque

Choose one or more of the following books to read to students:

Just Going to the Dentist by Mercer Mayer

The Berenstain Bears Visit the Dentist by Stan Berenstain

Show Me Your Smile! by Christine Ricci

A Visit to the Dentist (Dora the Explorer) by Anne Civardi

Timmy Visits the Dentist by Lim Swee Teck

Master Copy #10: *Visiting the Dentist*

Parent/Caregiver Information Letter for each student

Unit 10 Teacher Background Information

Objectives for Student Learning

- Understand who the dentist is
- Understand what the dentist does
- Identify different locations of dental visits

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
Who is the dentist?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens at the dentist?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What does the dentist do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where else might you visit a dental professional?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 10 Teacher Background Information with students. Allow time for discussion.
- Explain to students a dental office is a place that has dental providers to check the health of your teeth, head, neck, gums, and mouth.
- Use Master Copy #10: *Visiting the Dentist* as a transparency or coloring page.
- The members of the dental team are:
 - ◆ **The Receptionist** works at the front desk and greets you when you come in.
 - ◆ **The Dental Assistant** helps the dentist and dental hygienist get the exam room ready to receive you, and take X-rays as necessary.
 - ◆ **The Dental Hygienist** is trained to provide education and treatment to prevent tooth decay and gum disease.

- ◆ **The Dentist** is a doctor who checks the health of your head, neck, mouth, teeth, and gums. The dentist identifies problems, and treats and repairs damaged and decayed teeth. She or he can provide oral health education and preventive treatments, such as sealants and fluoride.

Getting to know the dentist

- Read the book *A Visit to the Dentist* by Eleanor Fremont and Andy Mastrocinque
- Has anyone been to the dentist?
- What happened when you went to the dentist?
- Allow time for students to share their experiences.

What happens at the dentist's office?

- Read one or more of the other books to your students.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 10 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
Who is the dentist?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens at the dentist?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What does the dentist do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where else might you visit a dental professional?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Master Copy #10

Pre-K: Class Activities 14 and 16

Visiting the Dentist

www.ada.org/sections/publicResources/pdfs/shining_activity_visiting.pdf



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Pre-K: Visiting the Dental Office

Class Activity 15: The Dental Team

Time Needed: 1 hour

Materials Needed:

White smock
Tiny dentist mirrors
Clean toothbrushes
Desk lamp with flexible stand
Paper towels
Master Copy #30: *Tooth Coloring Page*
Parent/Caregiver Information Letter for each student
Unit 10 Teacher Background Information

Objectives for Student Learning

- Identify dental team members
- Understand role of each dental team member

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
Who are the dental team members?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What does each team member do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 10 Teacher Background Information with students. Allow time for discussion.

Dental Team

- Discuss each person on the dental team.
- Explain to the group each member of the dental team and their job.
- Allow time for student sharing.

Pretend Play Dental Team

- Ask the group if anyone can describe the different people who work at the dentist's office.
- Describe the roles of the dentist, assistant, hygienist, and receptionist.
- Show students how to use various dental props: white smock, tiny dentist mirrors, clean toothbrushes, desk lamp with flexible stand, and paper towels.
- Students can pretend to brush their teeth or look at their teeth by putting the props on the outside of their mouth and using their imagination.
- Leave the pretend play area set up all week for students to enjoy during free play times.

Room Environment

- Bulletin Board: *We've been to the dentist.*
- Prepare a dental bulletin board for this activity. Print one copy of Master Copy #30 for each student. Write each student's name and the date of their completed dental visits on it. Allow students to decorate the paper tooth (if art supplies are available). Place a picture of each student (if available) in the center of the tooth. Place the paper teeth on the decorated bulletin board.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 10 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

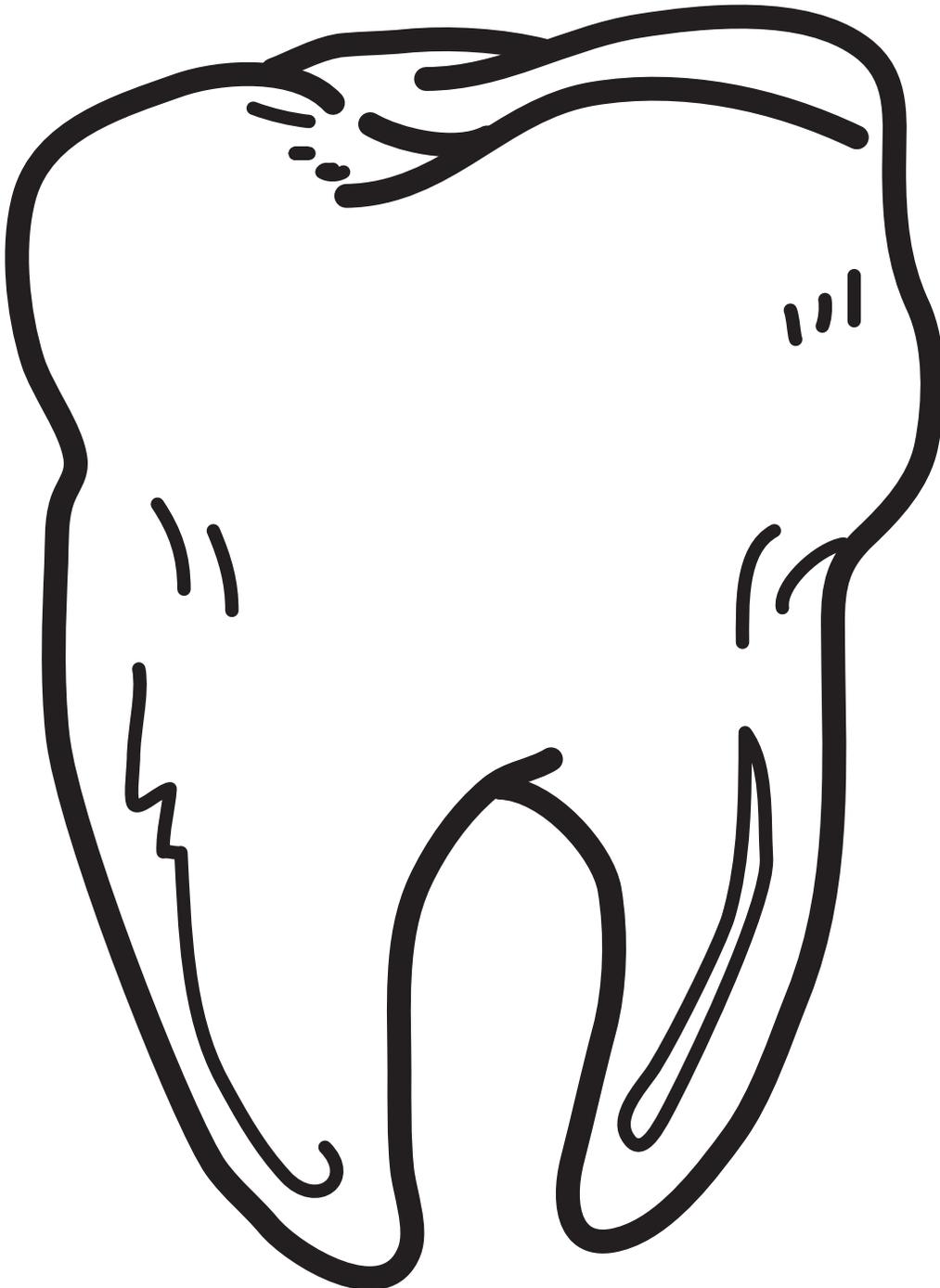
	Poor	Fair	Good
Who are the dental team members?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What does each team member do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tooth Coloring Page

www.coloringpagestube.com/index.php?main_page=large_coloring_page&pID=12307&cPath=748_776

Student's name: _____

Dental visits: _____



Pre-K: Visiting the Dental Office

Class Activity 16: The Dental Exam

Time Needed: 30–45 minutes

Materials Needed:

Book: *Timmy Visits the Dentist* by Lim Swee Teck
Master Copy #10: *Visiting the Dentist* (in Activity 14)
White smock
Disposable dentist mirrors*
Clean toothbrushes
Desk lamp with flexible stand or flashlight
Paper towels
Parent/Caregiver Information Letter for each student
Unit 10 Teacher Background Information

Objectives for Student Learning

- Understand the dental exam is fun and easy
- Identify what happens at a dental exam
- Identify tools the dental team uses
- Describe what the dental team is looking for during exam

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What happens at the dental exam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the dentist looking for when checking your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What dental tools does the dental professional use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 10 Teacher Background Information with students. Allow time for discussion.

Tools the dentist uses

- Use the Master Copy #10: *Visiting the Dentist* as a transparency or coloring sheet.
- Discuss each item.
- Explain to the group how each item and tool is used by a dental team.

Read the book

- Read the book *Timmy Visits the Dentist*. A dentist has written this book to encourage students to take better care of their teeth. Timmy is a typical 3-year-old with a fondness for sweets. His mother takes him to visit Dr. Friendly, the dentist, who explains to Timmy what happens when we do not care for our teeth.

Play the game: Who am I?

- Assign roles of a dental team to the students. Include the dentist, receptionist, hygienist, assistant, and dental patient.
- Play a game by giving clues and having the students guess which team member you are playing.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 10 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What happens at the dental exam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the dentist looking for when checking your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What dental tools does the dental professional use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Contact your local Health Department or a dental supply company for information on disposable mirrors.

Early Learning & Development Benchmarks

Pre-K, Unit 10: Visiting the Dental Office

This unit meets the following Early Learning and Development Benchmarks:

DOMAIN 1: Physical Well-Being, Health, and Motor Development

Sub-Domain – Motor Development

Fine Motor Skills

Goal 2: Children demonstrate strength and coordination of small motor skills.

Sensorimotor Skills

Goal 3: Children use their senses to guide motions.

Sub-Domain – Health and Personal Care

Daily Living Skills

Goal 6: Children practice basic personal care routines.

Goal 7: Children demonstrate personal health and hygiene skills.

DOMAIN 2: Social and Emotional Development

Sub-Domain – Social Development

Interactions with Adults

Goal 11: Children trust and interact comfortably with familiar adults.

Goal 12: Children seek assistance from adults when needed.

Adaptive Social Behavior

Goal 17: Children participate positively in group activities.

Goal 18: Children adapt to diverse settings.

Sub-Domain – Emotional Development

Self-Control

Goal 24: Children understand and follow rules and routines.

DOMAIN 3: Approaches Toward Learning

Sub-Domain – Learning Approaches

Curiosity and Interest

Goal 27: Children are curious about and interested in learning new things and having new experiences.

DOMAIN 4: Cognition and General Knowledge

Sub-Domain – Logic and Reasoning

Causation

Goal 32: Children demonstrate awareness of cause and effect.

Critical and Analytical Thinking

Goal 33: Children compare, contrast, examine, and evaluate experiences, tasks, and events.

Sub-Domain – Science

Scientific Thinking

Goal 43: Children engage in exploring the natural world by manipulating objects, asking questions, making predictions, and developing generalizations.

Sub-Domain – Social Studies

Geography

Goal 47: Children demonstrate awareness of location and spatial relationships.

Goal 48: Children demonstrate knowledge of the relationship between people, places, and regions.

Technology

Goal 51: Children use technology appropriately.

Community

Goal 53: Children demonstrate awareness of their community, human interdependence, and social roles.

Domain 5: Language, Communication, and Literacy

Sub-Domain – Literacy

Reading

Goal 69: Children demonstrate comprehension of printed material.

Goal 71: Children demonstrate appreciation and enjoyment of reading.

Tooth Tutor

Class Activities for Early Education (Kindergarten)

Kindergarten: Importance of a Healthy Mouth

Class Activity 1: Why We Have Teeth

Time Needed: 30 minutes

Materials Needed:

Master Copy #1: *Why Do We Have Teeth?*
Age and size-appropriate toothbrush for each student*
Parent/Caregiver Information Letter for each student
Unit 1 Teacher Background Information

Objectives for Student Learning

- Understand why we have teeth
- Describe how we use our teeth

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What do you know about your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we use our teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do we have teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 1 Teacher Background Information with students. Allow time for discussion.
- Review Master Copy #1: *Why Do We Have Teeth?*
- Summarize that we use our teeth to chew healthy types of food and make sounds, and people see them when we smile.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 1 (Appendix C) to send home with each student.

*Ask your County Health Department or Oral Health Coordinator for help obtaining toothbrushes.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What do you know about your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do we use our teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do we have teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Extension

- Invite a local dental hygienist or a school speech therapist to share information with your students on the importance of healthy teeth.

TOOTH TRIVIA

**The Statue of Liberty's mouth
is three feet wide.**

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia



Master Copy #1

Kindergarten: Class Activity 1

Why Do We Have Teeth?

Teeth give us a healthy, balanced face.



Teeth help us eat, bite, and chew.



Teeth are for smiling.



Teeth help us make sounds, speak, and sing.



Kindergarten: Importance of a Healthy Mouth

Class Activity 2: Brushing

Time Needed: 20–30 minutes

Materials Needed:

- One large tooth model and one large toothbrush*
- Large toothbrush model
- Individual child size tooth brush for each student
- Tube fluoride toothpaste, small paper plates to dispense toothpaste
- Cup to rinse toothbrush for each student
- Appropriate storage areas for student's toothbrushes
- Master Copy #6: *How to Take Care of My Toothbrush*
- Master Copy #5: *How to Brush Your Teeth*
- Parent/Caregiver Information Letter for each student
- Unit 5 Teacher Background Information

Objectives for Student Learning

- Demonstrate the correct way to brush teeth
- Understand when to brush teeth
- Understand how to care for a toothbrush at home
- Understand how to care for a toothbrush at school

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What kind of toothpaste should you use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many minutes should you brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a certain way to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many times per day should you brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When is the best time to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 5 Teacher Background Information with students. Allow time for discussion.

How to take care of my toothbrush

- Share Master Copy #6: *How to Take Care of My Toothbrush* and show students how to care for their toothbrush using the large Tooth Brush Model:
 - ◆ Rinse toothbrush bristles after every use to remove food and bacteria.
 - ◆ Store toothbrush where it can dry completely. It should not touch other toothbrushes.
 - ◆ Never share your toothbrush.
 - ◆ Get a new toothbrush when the bristles wear down.

- ◆ Rinse the brush with clean water.
- ◆ Rinse brushes in a way that keeps each student's toothbrush from splashing on other toothbrushes.
- ◆ Do not put brushes in a pile!
- Recommended measures for hygienic tooth brushing in schools:
 - ◆ Ensure that each student has his or her own toothbrush, clearly marked with identification. Do not allow students to share or borrow toothbrushes.
 - ◆ To prevent cross contamination of the toothpaste tube, put an age-appropriate amount of toothpaste onto a piece of wax paper or small paper plate before putting it onto the toothbrush. Do not let a toothbrush touch the toothpaste tube.
 - ◆ After the students finish brushing, make sure they rinse their toothbrushes thoroughly with tap water, allow them to air dry, and store them in an upright position so they don't come in contact with other student's brushes.
 - ◆ Provide students with paper cups to use for rinsing after they finish brushing. Do not allow them to share cups, and make sure they dispose of the cups properly after a single use.
- Review Master Copy #5: *How to Brush Your Teeth* with students.
 - ◆ Discuss with students that one of the ways we keep our teeth healthy and clean is to brush twice every day. Share with students that the best times to brush are after breakfast and before bed. Use the large tooth model to show students how to brush their teeth in a circular motion for two minutes. Choose a song to play during tooth brushing time. Develop a routine with students so they brush their teeth while the song is playing to make sure they brush for a full two minutes.
 - ◆ Advise students to brush their teeth with a small pea-sized amount of fluoride toothpaste and spit it out.
 - ◆ Advise students that parents or caregivers should help with tooth brushing.
- Distribute toothbrushes for the students to take home (if available).

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 1 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What kind of toothpaste should you use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many minutes should you brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a certain way to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many times per day should you brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When is the best time to brush your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Contact a local dental office or the local Health Department for information about obtaining a tooth model.



Master Copy #6

Kindergarten: Class Activity 2

How to Take Care of My Toothbrush

www.cdc.gov/OralHealth/infectioncontrol/factsheets/toothbrushes.htm

- Do not share toothbrushes. The exchange of body fluids that such sharing would foster places toothbrush sharers at an increased risk for infections, a particularly important consideration for persons with compromised immune systems or infectious diseases.
- After brushing, rinse your toothbrush thoroughly with tap water to ensure the removal of toothpaste and debris, allow it to air-dry, and store it in an upright position. If multiple brushes are stored in the same holder, do not allow them to contact each other.
- It is not necessary to soak toothbrushes in disinfecting solutions or mouthwash. This practice actually may lead to cross-contamination of toothbrushes if the same disinfectant solution is used over a period of time or by multiple users.
- It is also unnecessary to use dishwashers, microwaves, or ultraviolet devices to disinfect toothbrushes. These measures may damage the toothbrush.
- Do not routinely cover toothbrushes or store them in closed containers. Such conditions (a humid environment) are more conducive to bacterial growth than the open air.
- Replace your toothbrush every 3–4 months, or sooner if the bristles appear worn or splayed. This recommendation of the American Dental Association is based on the expected wear of the toothbrush and its subsequent loss of mechanical effectiveness, not on its bacterial contamination.

A decision to purchase or use products for toothbrush disinfection requires careful consideration, as the scientific literature does not support this practice at the present time.

Source: Centers for Disease Control and Prevention, Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion. Recommended Toothbrush Care.

Master Copy #5

Kindergarten: Class Activity 2

How to Brush Your Teeth

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/How_to_Brush_letter_English.pdf



Brush carefully for 3 to 5 minutes to remove plaque and food particles and keep your teeth and gums healthy.

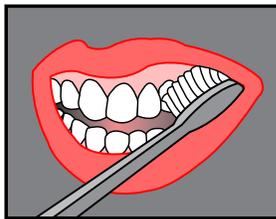
How to Brush Your Teeth



A smear of toothpaste is all you need to keep your teeth and gums clean and healthy.

1

Place the bristles at a 45 degree angle to the teeth. Slide the tips of the brush bristles under the gums.



2

Jiggle the bristles gently in small circles so that any plaque under the gum will be removed.



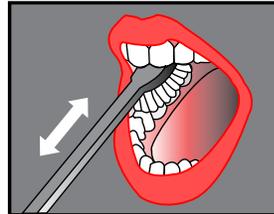
3

Be sure to brush both the outside and the tongue side of your teeth.



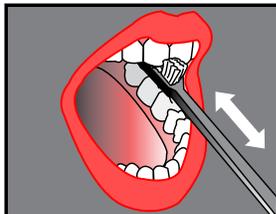
4

Brush the chewing surfaces of your teeth with a back and forth motion.



5

Brush the tongue side of your front teeth with the end of the brush, cleaning one tooth at a time.



6

Brush your tongue to remove germs and to make your breath fresh.



NORTH CAROLINA
ORAL HEALTH

State of North Carolina, Beverly Eaves Perdue, Governor - Department of Health and Human Services, Lanier M. Conslor, Secretary
Division of Public Health - Oral Health Section 9/10 www.ncdhhs.gov • www.oralhealth.ncdhhs.gov

Essential Academic Learning Requirements

Kindergarten, Unit 1: Importance of a Healthy Mouth

This unit meets the following Washington State Essential Academic Learning Requirements:

Reading

EALR 1: The student understands and uses different skills and strategies to read.
1.1.3 Apply understanding of oral language skills to develop reading skills.

Communication

EALR 1: The student uses listening and observation skills and strategies to gain understanding.
1.1 Uses listening and observation skills and strategies to focus attention and interpret information.

Mathematics

Core Content: K.1. Whole numbers (Numbers, Operations)
Core Content: K.3. Objects and their locations (Geometry/Measurement)

Science

EALR 1: Systems. The student knows and applies scientific concepts and principles to understand the properties, structures, and changes in physical, earth/space, and living systems.

Writing

EALR 1: The student understands and uses a writing process.

Health and Fitness

EALR 1: The student acquires the knowledge and skills necessary to maintain and active life: Movement, physical fitness and nutrition.
EALR 2: The student acquires the knowledge and skills necessary to maintain a health life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.
EALR 3: The student analyzes and evaluates the impact of real-life influences on health.
EALR4: The student effectively analyzes personal information to develop individualized health and fitness plans.

Essential Academic Learning Requirements

Tooth Tutor
Class Activities for Elementary School
(Grades 1–5)
First Grade

First Grade: Tooth Shapes and Functions

Class Activity 1: Parts of the Tooth

Time Needed: 45 minutes

Materials Needed:

- Master Copy #3: *Tooth Types*
- Master Copy #12: *Tooth Anatomy*
- Master Copy #13: *Mouth Discovery*
- Parent/Caregiver Information Letter for each student
- Unit 2 Teacher Background Information

Objectives for Student Learning

- Identify parts of the tooth
- Describe tooth types

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What are the parts of the tooth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What are the different types of teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 2 Teacher Background Information with students. Allow time for discussion.
- Show Master Copy #3: *Tooth Types* and explain the different types of teeth.
- Show Master Copy #12: *Tooth Anatomy* and explain the different layers and parts teeth.
- Show Master Copy #13: *Mouth Discovery* and discuss parts of the mouth.
- Discuss the layers of the tooth.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 1 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are the parts of the tooth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What are the different types of teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

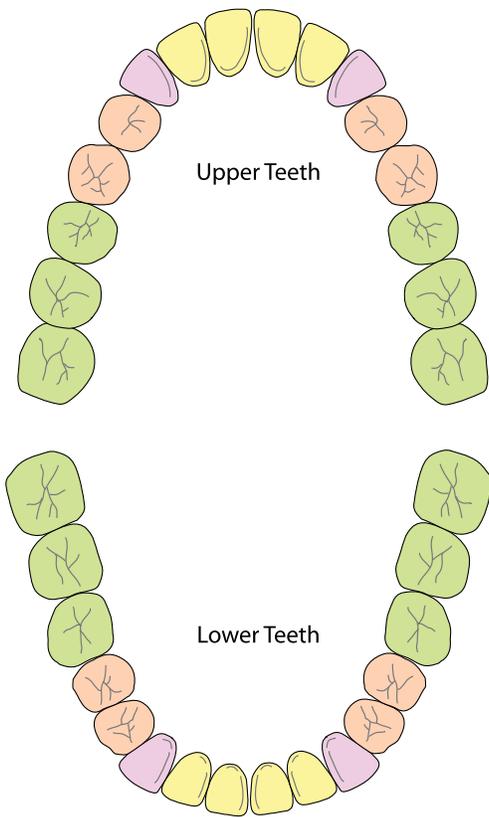
Master Copy #3

First Grade: Class Activities 1 and 2

Tooth Types

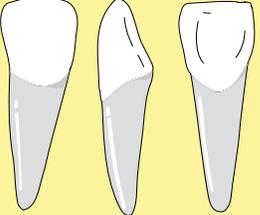
www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Tooth_Types.pdf

Humans have four types of permanent teeth: incisors, canines, premolars, and molars.

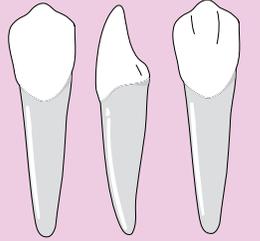


Each tooth type has a special use when we bite and chew food.

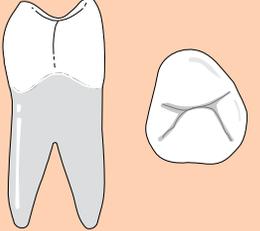
Incisors
have a sharp biting surface and are used for cutting food into small chewable pieces



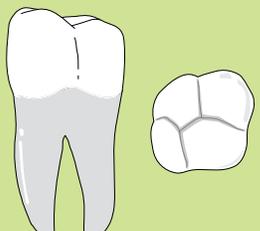
Canines
also called cuspids, have a sharp, pointed biting surface to grip and tear food.



Premolars
also called bicuspids, have a flat biting surface used to tear and crush food.



Molars
are the largest teeth. They have a large flat biting surface to chew, crush and grind food.



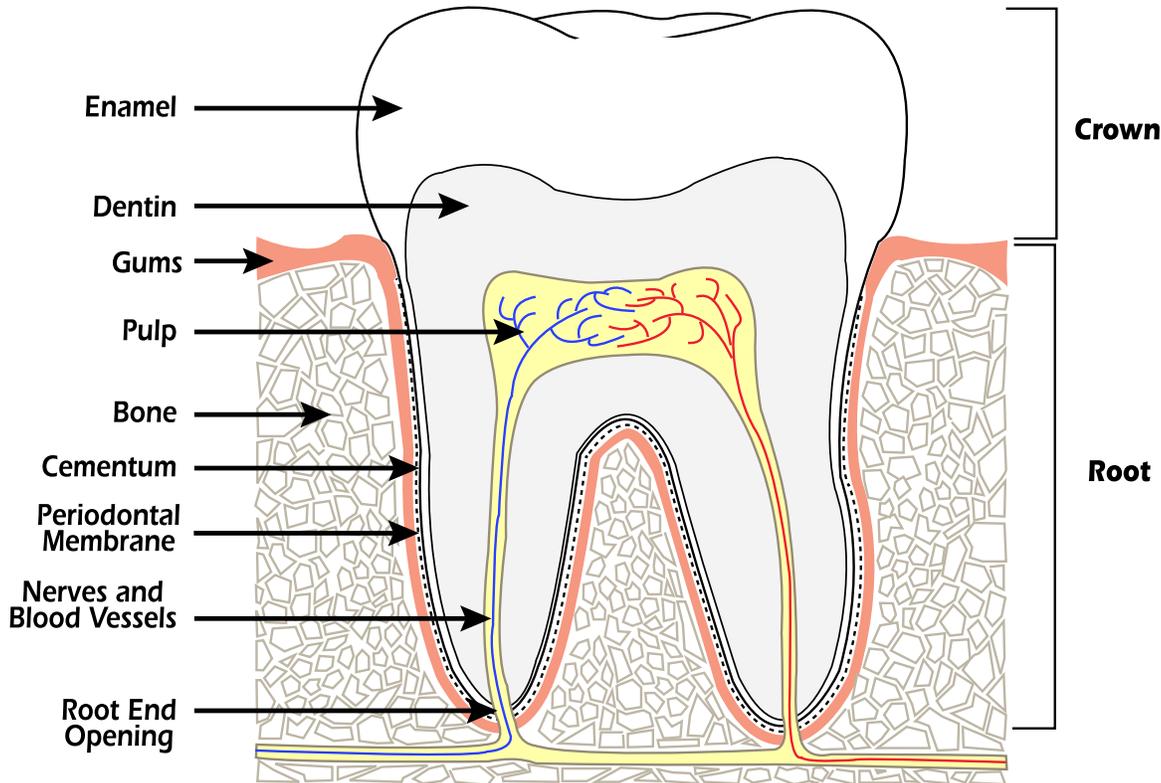
State of North Carolina, Beverly Eaves Perdue, Governor - Department of Health and Human Services, Lanier M. Cansler, Secretary
Division of Public Health - Oral Health Section 9/10 www.ncdhhs.gov • www.oralhealth.ncdhhs.gov

Master Copy #12

First Grade: Class Activity 1

Tooth Anatomy

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Tooth_Anatomy.pdf



Humans have two sets of teeth, the primary teeth (commonly called baby teeth) and the permanent teeth.

Children have 20 primary teeth; they are replaced by the permanent teeth by about age 13. Adults have 32 permanent teeth.

Tooth Glossary:

Cementum - a layer of tough, yellowish, bone-like tissue that covers the root of a tooth. It helps hold the tooth in the socket. The fibers of the periodontal membrane are embedded within the cementum.

Crown - the visible part of a tooth. What you see is the tooth enamel.

Dentin - the hard but porous tissue located under both the enamel and cementum of the tooth.

Enamel - the hard, shiny, white outer surface of the tooth. Tooth enamel is the hardest substance in the human body.

Gums - the soft tissue that surrounds the roots of the tooth.

Nerves - nerves transmit signals to and from the brain. This lets you feel things like hot, cold, and pain.

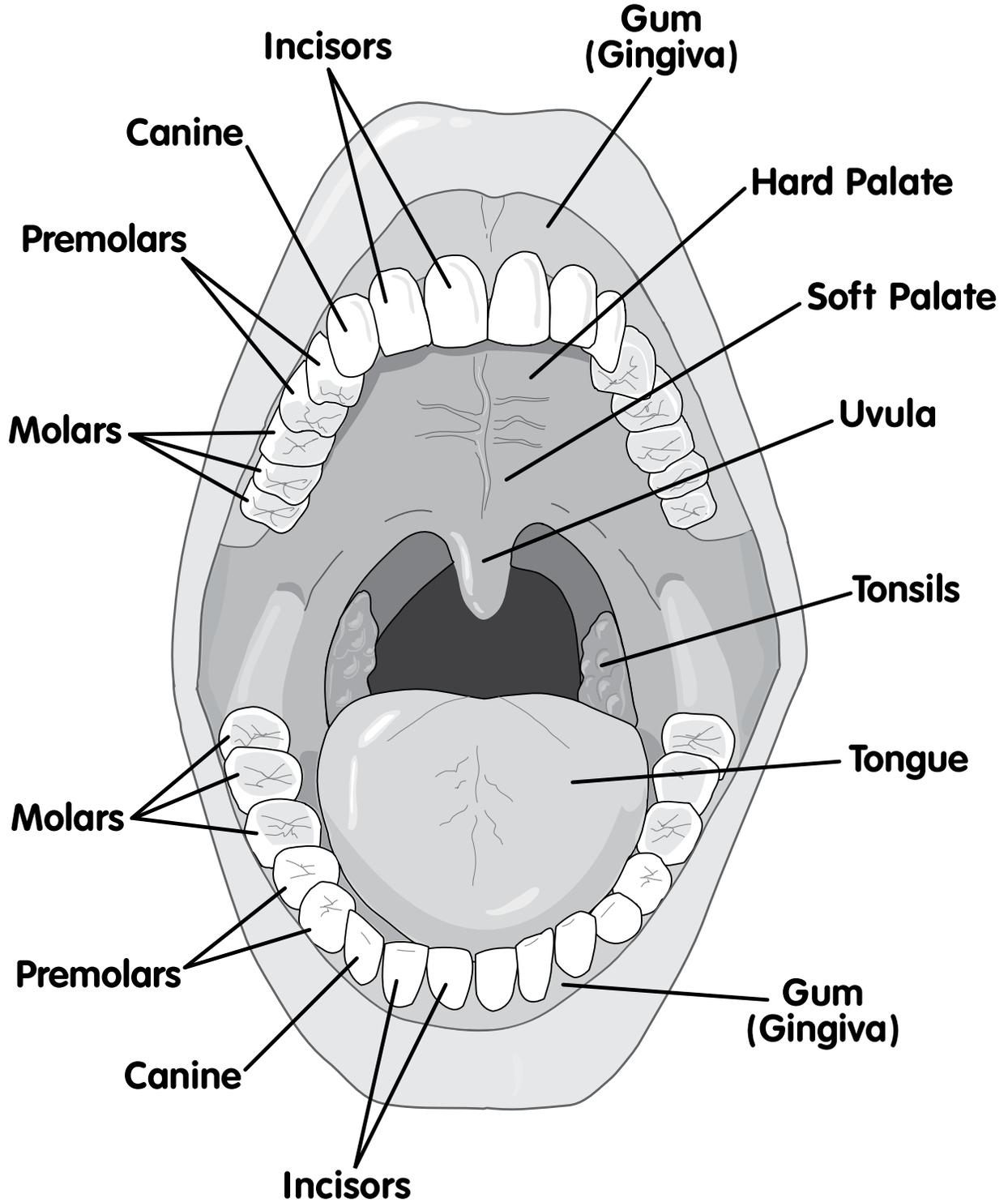
Periodontal membrane/ligament - the strong, fleshy tissue between tooth and the tooth socket that holds the tooth in place. The fibers of the periodontal membrane are embedded within the cementum.

Pulp - the soft center of the tooth. The pulp contains blood vessels and nerves; it nourishes the dentin.

Root - the anchor of a tooth that extends into the jawbone. The number of roots range from one to three.

Mouth Discovery

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Mouth_Discovery.pdf



First Grade: Tooth Shapes and Functions

Class Activity 2: Functions of Teeth

Time Needed: 30 minutes

Materials Needed:

- Book: *The Tooth Book* by Laurie King and Fallon Parrott
- Colorful paper to create chart recording when children lose their teeth
- Master Copy #2: *When Do Baby Teeth Appear?*
- Master Copy #3: *Tooth Types* (in Activity 1)
- Parent/Caregiver Information Letter for each student
- Unit 2 Teacher Background Information

Objectives for Student Learning

- Understand the functions of teeth
- Understand when teeth appear
- Understand difference between baby teeth and adult teeth

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
What are teeth used for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do you get your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the difference between baby teeth and adult teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do babies need teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 2 Teacher Background Information with students. Allow time for discussion.
- Read *The Tooth Book*. Allow time for discussion.
- Use Master Copies #2 and #3 as teacher resources.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 1 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

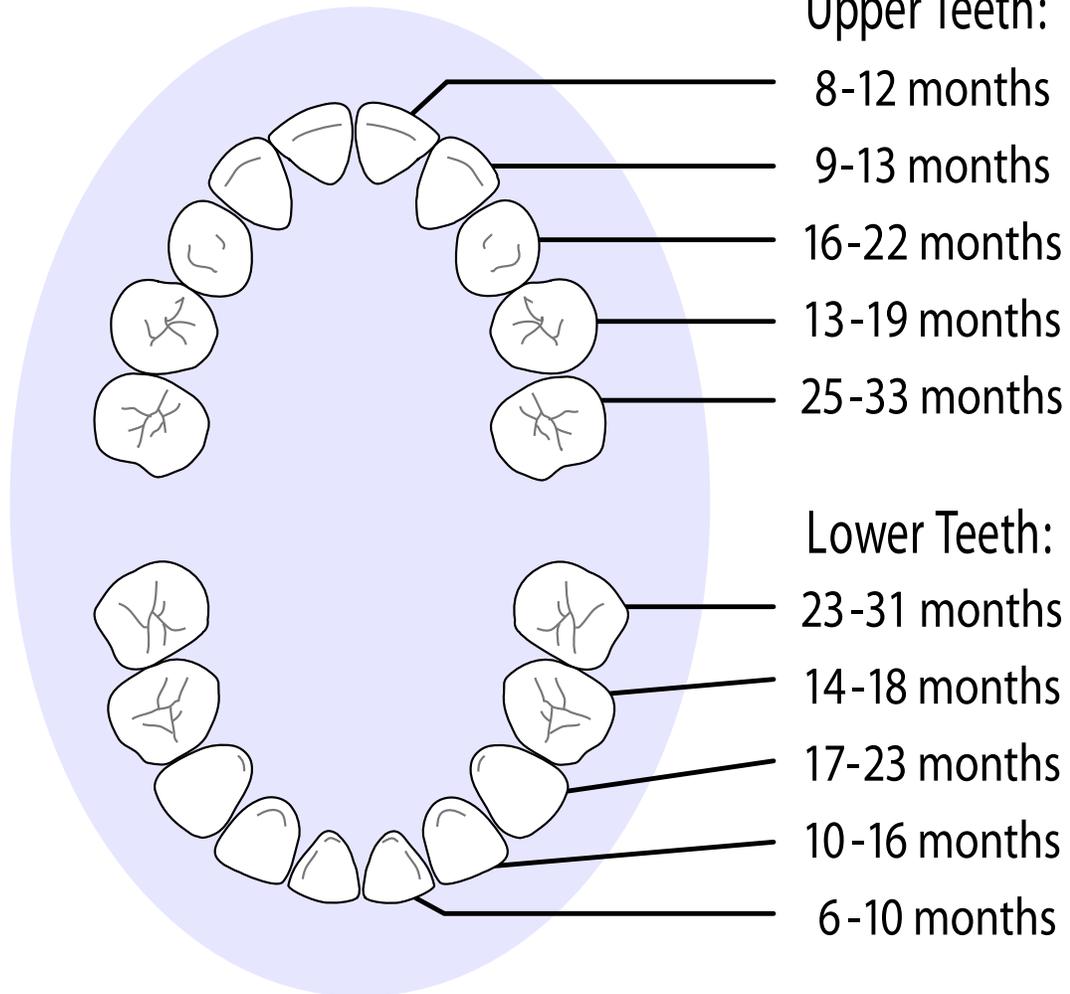
	Poor	Fair	Good
What are teeth used for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When do you get your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the difference between baby teeth and adult teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Why do babies need teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Master Copy #2

First Grade: Class Activity 2

When Do Baby Teeth Appear?

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Eruption_Chart_Baby_Teeth.pdf



There are 20 baby teeth, or primary teeth:
ten in the upper jaw and ten in the lower.

Healthy baby teeth are important for chewing food, for speaking clearly, for normal jaw growth, and a healthy appearance. But most important, baby teeth keep the spacing for the adult teeth, or permanent teeth. Baby teeth are replaced by permanent teeth as your child gets older. Baby teeth lost early because of tooth decay is the leading cause for crowded and crooked permanent teeth.



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Essential Academic Learning Requirements

First Grade, Unit 2: Tooth Shapes and Functions

This unit meets the following Washington State Essential Academic Learning Requirements:

Communication

EALR 1: The student uses listening and observation skills and strategies to gain understanding.

Health and Fitness

EALR 1: The student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.

EALR 2: The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.

2.2 Understands stages and growth and development

2.3 Understands the concepts of prevention and control of disease

2.3.2 Recognizes how to prevent or reduce the risks of non-communicable disease

EALR 3: The student analyzes and evaluates the impact of real-life influences on health.

3.5 Applies decision-making skills related to the promotion of health

EALR 4: The student effectively analyzes personal information to develop individualized health and fitness plans.

4.1 Analyzes personal health and fitness information

4.1.1 Understands daily health and fitness habits

Science

EALR 1: Part-Whole Relationships.

1.1 Understands living and nonliving things are made of parts.

People give names to the parts that are different from the name of the whole object, plant, or animal.

EALR 2: Answer questions by explaining observations of the natural world.

EALR 4: Different kinds of materials display different properties

Reading

EALR1: The student understands and uses different skills and strategies to read.

1.3 Build vocabulary through wide reading

EALR 3: The student reads different materials for a variety of purposes

Mathematics

EALR1: Whole number relationships.

1.6 Reasoning, problem solving, and communication

Essential Academic Learning Requirements

Tooth Tutor
Class Activities for Elementary School
(Grades 1–5)
Second Grade

Second Grade: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 1: Fluoride

Time Needed: 15–20 minutes

Materials Needed:

- Piece of celery with leaves
- Knife to cut celery lengthwise (*teacher may want to pre-cut the celery*)
- Food coloring (blue and red)
- 2–8 small glasses
- Parent/Caregiver Information Letter for each student
- Unit 4 Teacher Background Information

Objectives for Student Learning

- Understand how fluoride prevents decay
- Understand where we get fluoride

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
How does fluoride help fight decay?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where do we get fluoride?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 4 Teacher Background Information with students. Allow time for discussion.

Class Activity

- Students will conduct an experiment to show the action of fluoride on tooth enamel. You may choose to divide the class into 1–4 groups.
 - * Use a 10–12" piece of celery with leaves.
 - * Starting at the bottom of the stalk, cut a slit lengthwise, from the bottom to the middle of the stalk.
 - * Leave the top portion of the celery joined.
 - * Put 20 drops of red food coloring in one glass and 20 drops of blue food coloring in the second glass.
 - * Set the glasses side by side.
 - * Place one leg of the celery into the first glass and the other leg into the second glass.
 - * Set the celery aside for 5–24 hours.
 - * Discuss how teeth absorb fluoride from the inside out and how it is similar to the way celery absorbs the colored water.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today's letter.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
How does fluoride help fight decay?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where do we get fluoride?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



TOOTH TRIVIA

Did you know?

**Teeth are as unique as fingerprints!
Even identical twins have different
dental patterns.**

Source: ADA American Dental Association,
Flossy's Big Book of Dental Trivia

Second Grade: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 2: Dental Sealants

Time Needed: 15–20 minutes

Materials Needed:

- One piece of white chalk for each group
- One bottle of Elmer’s school glue for each group
- One bottle of food coloring for each group
- A paper towel for each group
- Master Copy #14: *Dental Sealants Seal Out Tooth Decay*
- Parent/Caregiver Information Letter for each student
- Unit 4 Teacher Background Information

Objectives for Student Learning

- Understand what dental sealants are
- Describe how dental sealants help prevent tooth decay

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What are sealants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do sealants help prevent tooth decay?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 4 Teacher Background Information with students. Allow time for discussion.
- Give each group a paper towel, chalk, a bottle of Elmer’s school glue, and some food coloring.
- Have the groups paint one end of the chalk with glue and allow it to dry.
- Then have students lay the chalk on the paper towel. Explain that sealant material is painted on the tooth surface – in the grooves of the molar – just like they painted the chalk.
- Have the students carefully put one drop of food coloring on the uncoated end of the chalk. Discuss what happens. The food coloring is absorbed.
- Have students place one drop of food coloring on the glue-coated end. Discuss what happens. The color is not absorbed because of the protective coating. The glue acts like a sealant.
- Point out that the glue works on the chalk as a sealant works on teeth. The sealant does not let acid get through the enamel of the tooth. The sealant helps protect teeth from decay.
- Give a copy of Master Copy #14: *Dental Sealants Seal Out Tooth Decay* to each student to take home to their parent or guardian.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today’s letter.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are sealants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do sealants help prevent tooth decay?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential Academic Learning Requirements

Second Grade, Unit 4: Preventing Tooth Decay

This unit meets the following Washington State Essential Academic Learning Requirements:

Health and Fitness

EALR1: The student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.

1.3 Understands the components of health-related fitness and interprets information from feedback, evaluation, and self-assessment in order to improve performance.

1.5 Understands relationship of nutrition and food nutrients to body and composition and physical performance.

EALR 2: The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.

EALR 4: The student effectively analyzes personal information to develop individualized health and fitness plans.

Science

EALR 2: Carry out investigations by using instruments, observing, recording, and drawing evidence-based conclusions.

EALR 4: The properties of an object depend on its shape and on the material it is made from.

Reading

EALR 1: The student understands and used different skills and strategies to read.

1.3 Build vocabulary through wide reading

Communication

EALR1: Use listening and observation skills and strategies to focus attention and interpret information.

Essential Academic Learning Requirements

Dental Sealants Seal Out Tooth Decay

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Seal%20Out%20Tooth%20Decay%20-%20English.pdf

Dental Sealants Seal Out Tooth Decay

Sometimes nice smiles need extra protection from tooth decay. Dental sealants prevent decay.

What are dental sealants?
Dental Sealants are thin plastic coatings that cover the chewing surfaces of back teeth. These back teeth are called molars. Sealants protect molars from decay.

Fluoride and Sealants Together Protect the Entire Surface of the Tooth from Decay

Fluoride protects the smooth surfaces

Sealants protect the chewing surfaces

Ask your dentist about sealants and fluoride.

For Total Protection From Decay:

- ✓ Get dental sealants if needed
- ✓ Make sure you're getting fluoride
- ✓ Brush and floss every day
- ✓ Eat a nutritious diet
- ✓ Visit your dentist regularly

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Department of Health and Human Services, Lamer M. Cantler, Secretary
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Permanent molars often need sealants to protect them from decay.

When do molars come in?

Upper Teeth

Lower Teeth

Six Year Molars → 5-7 years old

Twelve Year Molars → 11-14 years old

Wisdom Teeth → 17-21 years old

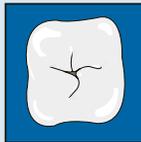
Wisdom Teeth

Twelve Year Molars

Six Year Molars

The best time to put sealants on teeth is just after the permanent molars appear, but before decay starts.

Why are molars at risk for decay?

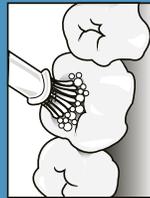


As a molar grows, pits and grooves form on the top of the tooth. These grooves can trap food and bacteria and cause decay.

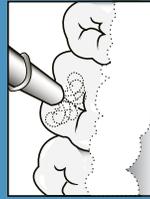


A dental sealant fills the grooves. This keeps food out and makes it easier to keep the tooth clean.

How Dental Sealants are Applied to Teeth



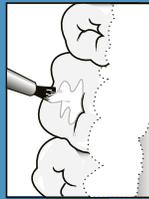
1. The tooth and all of the pits and grooves are cleaned thoroughly.



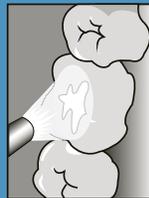
2. The tooth is dried with air. Cotton is put around the tooth to keep it dry.



3. A solution is put on the tooth to make the sealant stick better.



4. The sealant is applied to the tooth. It flows into the pits and grooves.



5. A special light is used to quickly harden the sealant.



6. The new sealant will help to protect the tooth from decay for many years.

Who should get sealants on their teeth?

Children should be checked by a dentist to find out if sealants might prevent decay. The best time to check would be just after the six-year molars appear. Teeth should be checked again just after the twelve-year molars appear. These molars are permanent teeth and will not grow back if they are lost to decay.

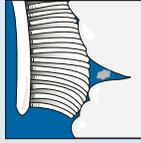
Do baby teeth need sealants?

Sometimes baby teeth have pits and grooves that are deep enough to trap food and cause decay. This could make them come out earlier than they should. Sealants can prevent problems. Your dentist can advise you if sealants are recommended for your child.

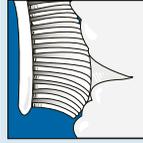
Does it hurt to have sealants put on teeth?

No, getting a sealant is painless. It only takes about five minutes per tooth. No drilling or shots are necessary.

How do sealants prevent decay?



Toothbrush bristles cannot clean out food and bacteria trapped in open grooves.



Dental sealants fill pits and grooves. This keeps the food out, and makes the tooth easier to clean.

How long do sealants last?

Sealants should last up to ten years with proper care. Proper care includes regular brushing and flossing and a healthy diet, low in sweets. Children should not chew ice or bite hard objects, such as hard candy. Sealants that are damaged or loosened can easily be repaired by your dentist.

How much do sealants cost?

Generally, sealing one tooth costs less than filling one tooth. Unfortunately, a filling is usually just the first step to saving a tooth damaged by decay. Decay prevention with sealants and regular care is cheaper in the long run.

Why is preventing decay with sealants better than repairing a diseased tooth?

Sealants can prevent decay and save the structure of the natural tooth. Sealants can prevent the pain caused by decayed teeth. Sealants can prevent the trouble, expense, and discomfort of dental repairs.

Tooth Tutor
Class Activities for Elementary School
(Grades 1–5)
Third Grade

Third Grade: The Tooth Decay Process

Class Activity 1: Tooth Decay

Time Needed: 45 minutes

Materials Needed:

Master Copy #12: *Tooth Anatomy*
Master Copy #15: *How Do We Get Fluoride for Our Teeth?*
Four hard-boiled eggs (cover two with fluoride gel, toothpaste, or varnish, and leave overnight the day before the activity)
Fluoride gel or varnish (can be obtained from a local dentist)
Four glasses
One cup of white vinegar
One can of cola
Four plastic spoons (for lifting egg out of glass)
Several straight pins
Parent/Caregiver Information Letter for each student
Unit 3 Teacher Background Information

Objectives for Student Learning

- Understand how fluoride helps prevent tooth decay
- Understand the function of teeth
- Describe what fluoride is
- Understand the parts of the tooth affected by fluoride

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What is fluoride?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does fluoride help fight decay?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 3 Teacher Background Information with students. Allow time for discussion.
- Share Master Copy #12: *Tooth Anatomy*. Tell students that acid in our mouths (caused by sugar and bacteria) weakens tooth enamel. When the enamel is weak, cavities form in our teeth.
- Show students the four hard-boiled eggs. Explain how the shell contains minerals that protect the inside of the egg. The shell is like the enamel that protects our teeth. Explain that two glasses contain vinegar and two glasses contain cola. The cola and vinegar are acids similar to the acid produced by the bacteria in our mouths. Place one of the untreated eggs in a glass of vinegar and one in a glass of cola.
- Place one egg covered with fluoride gel or varnish in the glass of vinegar and the other in a glass of cola.
- After two hours, and again the following day, invite students to take a pin and prick the shell of each egg. Ask what they notice. (The shell without the fluoride treatment is softer than the egg with the treatment.) The longer the unprotected egg is exposed to acid, the softer the shell gets. After a few days the shell will dissolve.

- Review how fluoride toothpaste, when used while brushing, helps to strengthen tooth enamel which helps prevent decay.
- Discuss Master Copy #15: *How Do We Get Fluoride for Our Teeth?*

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 3 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What is fluoride?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does fluoride help fight decay?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA



A riddle:

What two letters of the alphabet make us lose our teeth?

Answer:

D. K. (decay)

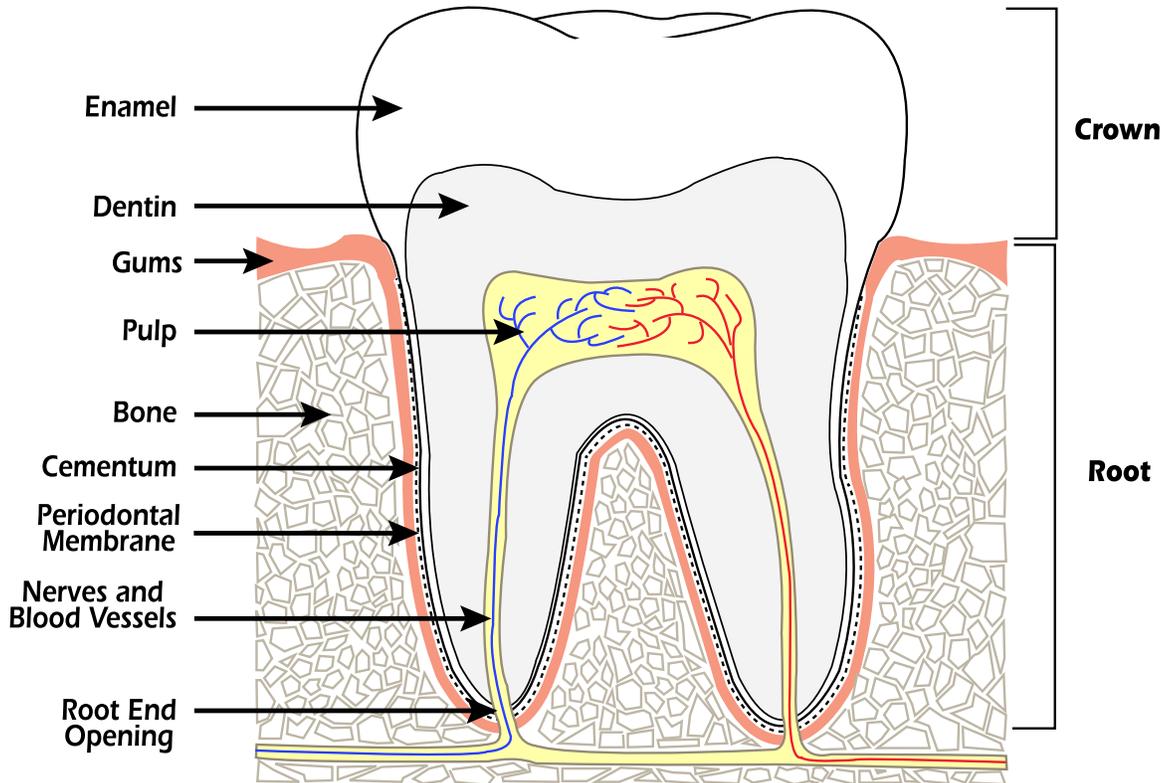
Source: Washington State Department of Health (1996). *Tooth Tutor*.

Master Copy #12

Third Grade: Class Activities 1 and 2

Tooth Anatomy

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Tooth_Anatomy.pdf



Humans have two sets of teeth, the primary teeth (commonly called baby teeth) and the permanent teeth.

Children have 20 primary teeth; they are replaced by the permanent teeth by about age 13. Adults have 32 permanent teeth.

Tooth Glossary:

Cementum - a layer of tough, yellowish, bone-like tissue that covers the root of a tooth. It helps hold the tooth in the socket. The fibers of the periodontal membrane are embedded within the cementum.

Crown - the visible part of a tooth. What you see is the tooth enamel.

Dentin - the hard but porous tissue located under both the enamel and cementum of the tooth.

Enamel - the hard, shiny, white outer surface of the tooth. Tooth enamel is the hardest substance in the human body.

Gums - the soft tissue that surrounds the roots of the tooth.

Nerves - nerves transmit signals to and from the brain. This lets you feel things like hot, cold, and pain.

Periodontal membrane/ligament - the strong, fleshy tissue between tooth and the tooth socket that holds the tooth in place. The fibers of the periodontal membrane are embedded within the cementum.

Pulp - the soft center of the tooth. The pulp contains blood vessels and nerves; it nourishes the dentin.

Root - the anchor of a tooth that extends into the jawbone. The number of roots range from one to three.

How Do We Get Fluoride for Our Teeth?

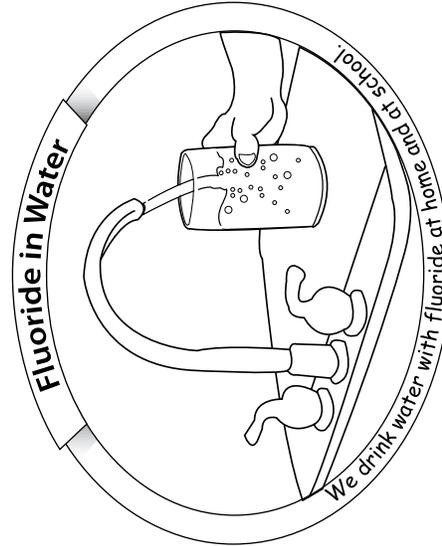
www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Fluoride_Coloring_Sheet_tabloid.pdf



We all need fluoride for our teeth.
Adults need fluoride too.

Fluoride makes teeth strong
so they can fight decay
and stay healthy.

Here are five ways we can get fluoride
for our teeth.



Third Grade: The Tooth Decay Process

Class Activity 2: Tooth Decay

Time Needed: 30–45 minutes

Materials Needed:

- Small paring knife
- One firm apple
- Plastic wrap for one half of apple
- One sheet of construction paper for each student
- Glue for students to share
- Master Copy #12: *Tooth Anatomy* (in Activity 1)
- Master Copy #16: *Growth of a Cavity*
- Worksheet: *Growth of a Cavity*
- Master Copy #5: *How to Brush Your Teeth*
- Parent/Caregiver Information Letter for each student
- Unit 3 Teacher Background Information

Objectives for Student Learning

- Understand how decay spreads in cavities
- Identify the parts of a tooth
- Understand how to prevent cavities from forming

Essential Questions

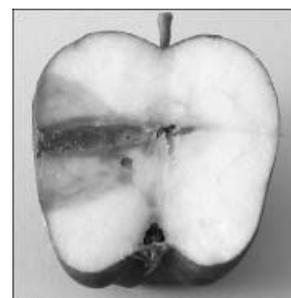
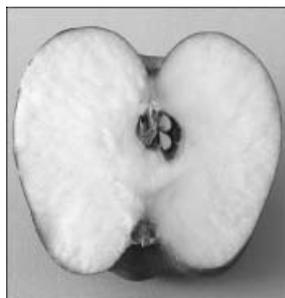
Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What are the parts of a tooth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does a cavity grow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How can you prevent cavities from forming?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 3 Teacher Background Information with students. Allow time for discussion.
- Cut the apple in half 2–3 days before presenting the activity. Place plastic wrap on one half of the apple. Cut a one-inch deep hole in the other half of the apple. Remove a piece of apple the diameter of a small knife. Place both halves of apple in a bag for 2–3 days before presenting the activity.
- Show students the apple and describe what you did to prepare the apple. Cut the apple through the decayed spot. Students should observe the progression of decay in the apple. Allow students time to discuss.
- Point out to students that what they have observed is the beginning of decay. The more time the hole was in the apple, the more the area around the hole decayed. Explain that today you will be talking about how a similar thing happens to teeth when forming a cavity.



- Share Master Copy #12 *Tooth Anatomy*. Point to and name the different parts of the teeth. The enamel of the tooth protects the inside of the tooth. This is like the skin of the apple protecting the inside of the apple. Decay starts in the enamel. It can spread into the dentin. The cavity can progress until the entire tooth is involved. If a dentist does not fill the cavity, the tooth may be lost.
- Explain that food breaks down into simple sugars. These sugars and starches feed the plaque (bacteria) making acid. Acid can destroy tooth enamel. When acid attacks the tooth, the decay process begins. It is important to brush teeth with fluoride twice a day to keep the acid from damaging teeth.
- Share Master Copy #16 *Growth of a Cavity*. Point out how each tooth shows more decay.
- Hand out the worksheet *Growth of a Cavity* and construction paper. Explain that students are to cut out the pictures of the teeth and glue them onto the paper in the order that shows how cavities grow.
- Review Master Copy #5 *How to Brush Your Teeth*.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 3 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are the parts of a tooth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does a cavity grow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How can you prevent cavities from forming?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential Academic Learning Requirements

Third Grade, Unit 3: The Tooth Decay Process

This unit meets the following Washington State Essential Academic Learning Requirements:

Reading

- EALR 1: The student understands and uses different skills and strategies to read.
- EALR 3: The student reads different materials for a variety of purposes.

Communication

- EALR1: The student applies a variety of listening strategies to accommodate the listening situation.
- EALR 2: The student uses communication skills and strategies to interact/work effectively with others.

Mathematics

- EALR 3: Reasoning, problem solving, and communication.

Science

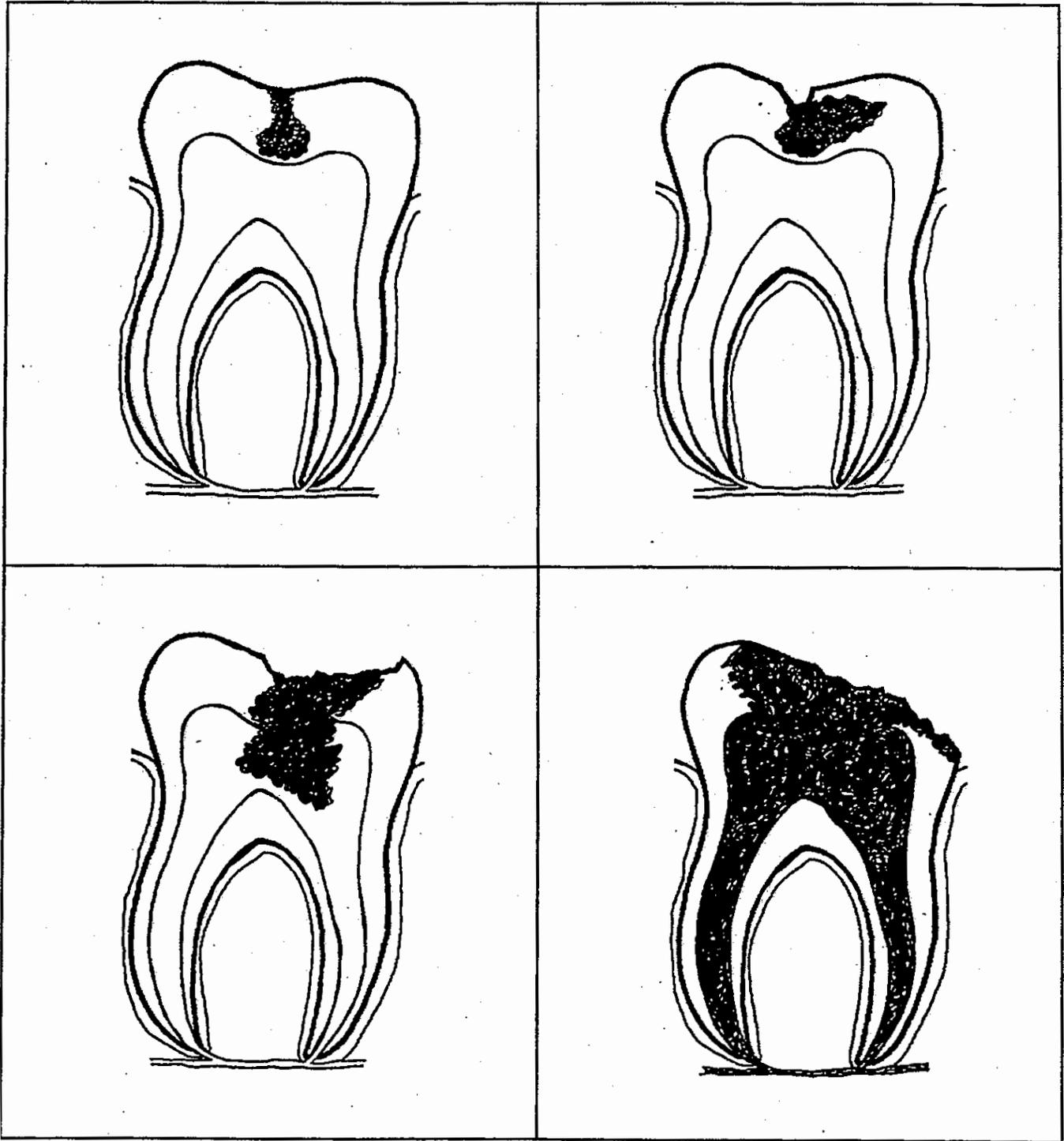
- EALR 1: The student understands role of each part in a system.
- EALR 2: The student understands conducting investigations.
- EALR 3: The student understands solving problems.
- EALR 4: The student understands properties of materials.

Health and Fitness

- EALR 1: The student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.
- EALR 2: The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.
- EALR 3: The student analyzes and evaluates the impact of real-life influences on health.

Essential Academic Learning Requirements

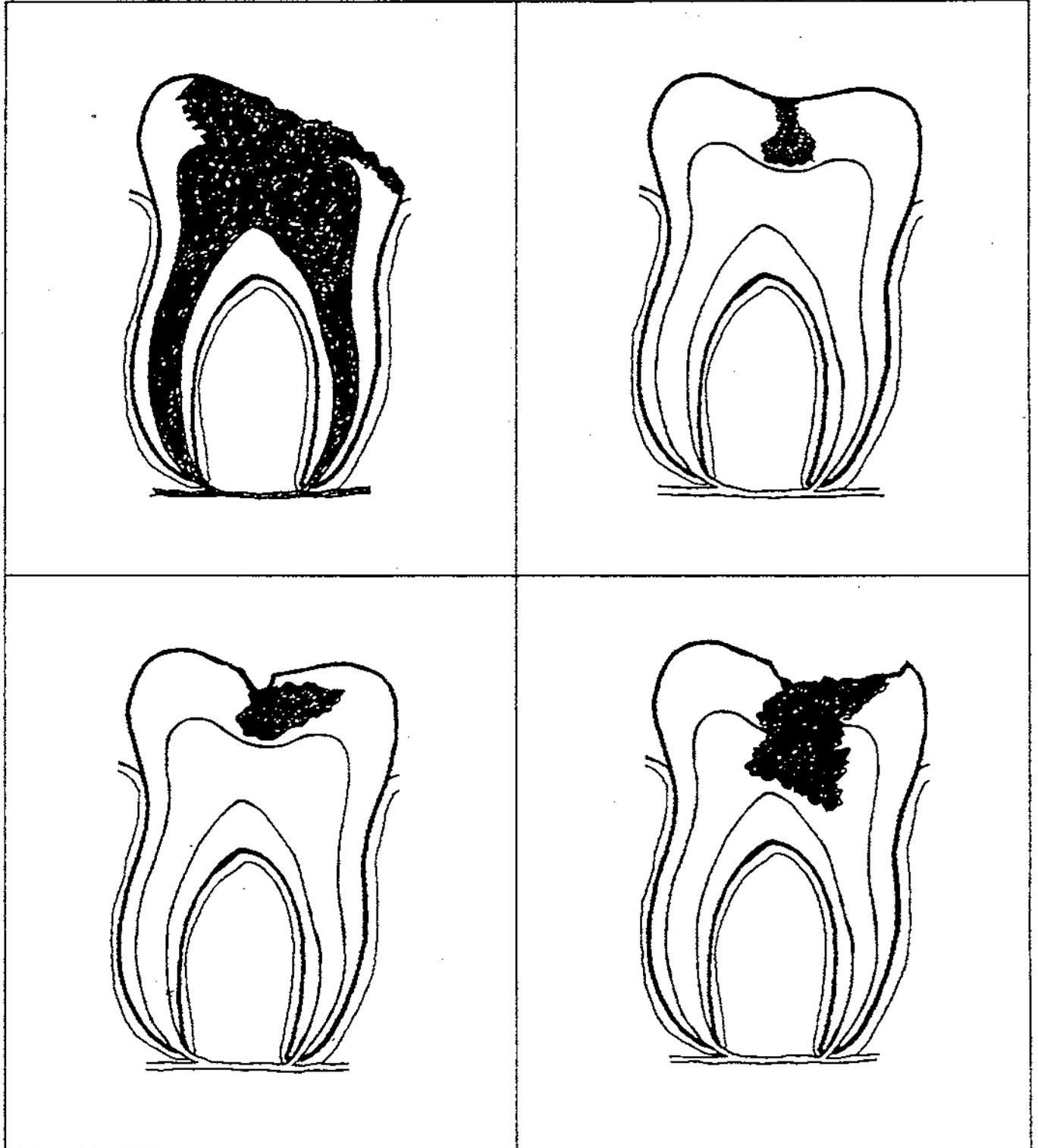
Growth of a Cavity



Worksheet

Third Grade: Class Activity 2

Growth of a Cavity



Master Copy #5

Third Grade: Class Activity 2

How to Brush Your Teeth

www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/How_to_Brush_letter_English.pdf



Brush carefully for 3 to 5 minutes to remove plaque and food particles and keep your teeth and gums healthy.

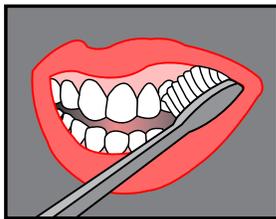
How to Brush Your Teeth



A smear of toothpaste is all you need to keep your teeth and gums clean and healthy.

1

Place the bristles at a 45 degree angle to the teeth. Slide the tips of the brush bristles under the gums.



2

Jiggle the bristles gently in small circles so that any plaque under the gum will be removed.



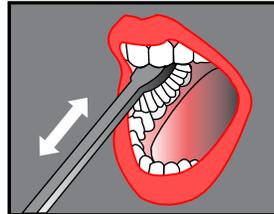
3

Be sure to brush both the outside and the tongue side of your teeth.



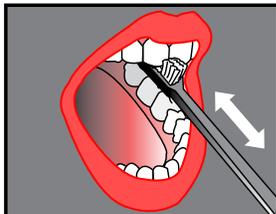
4

Brush the chewing surfaces of your teeth with a back and forth motion.



5

Brush the tongue side of your front teeth with the end of the brush, cleaning one tooth at a time.



6

Brush your tongue to remove germs and to make your breath fresh.



NORTH CAROLINA
ORAL HEALTH

State of North Carolina, Beverly Eaves Perdue, Governor - Department of Health and Human Services, Lanier M. Conslar, Secretary
Division of Public Health - Oral Health Section 9/10 www.ncdhhs.gov • www.oralhealth.ncdhhs.gov

Tooth Tutor
Class Activities for Elementary School
(Grades 1–5)
Fourth Grade

Fourth Grade: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 1: The Food Pyramid

Time Needed: 30 minutes

Materials Needed:

Master Copy #17: *MyPyramid Poster*
Master Copy #18: *Soft Drinks and Oral Health*
Master Copy #19: *How Sweet Is It?*
Master Copy #4: *25 Healthy Snacks for Kids*
Parent or guardian letter for each student
Unit 4 Teacher Background Information

Objectives for Student Learning

- Identify *MyPyramid*
- Understand how the food we eat affects our teeth
- Identify the amount of sugar in soft drinks and snacks
- Identify healthy snacks

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
What message does <i>MyPyramid</i> promote about the food we eat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often and what types of foods do you eat between meals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens if we frequently eat foods high in sugar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What are healthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 4 Teacher Background Information with students. Allow time for discussion.
- Share Master Copy #17: *MyPyramid Poster*. Discuss with students the kinds of foods found on the poster and how to include them in their daily diet.
- Discuss how the foods we choose to eat can affect our health and our teeth. The more unhealthy snacks we eat (i.e., pretzels, chips, or crackers), the more often acid is produced, which increases the risk of getting cavities. Eating unhealthy snacks between meals not only decreases our appetite for nutritious food but increases our risk of cavities.
- Share with students Master Copy #18: *Soft Drinks and Oral Health* and discuss the disadvantages of drinking sodas. *MyPyramid* recommends limiting foods high in added sugar to 10 teaspoons (40 grams of sugar) per day for students 9 years and older. Explain to students that **one** soda can contain as many as 9–12 teaspoons of sugar. Soft drinks do not provide any nutrition.

- Give each student Master Copy #18 *How Sweet Is It?* and Master Copy #4 *25 Healthy Snacks for Kids*. Ask them to take the information home and share it with their families. If you prefer to use your school website, go to www.mypyramid.gov.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today's lesson.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What message does <i>MyPyramid</i> promote about the food we eat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often and what types of foods do you eat between meals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What happens if we frequently eat foods high in sugar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What are healthy snacks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA



Q: What dairy delights should you chomp on to keep your smile sparkling white?

A: Cheese!

(For example, aged Cheddar, Swiss, or Monterey Jack)

Source: Michigan Dental Association (www.smilemichigan.com)

Master Copy #17

Fourth Grade: Class Activity 1

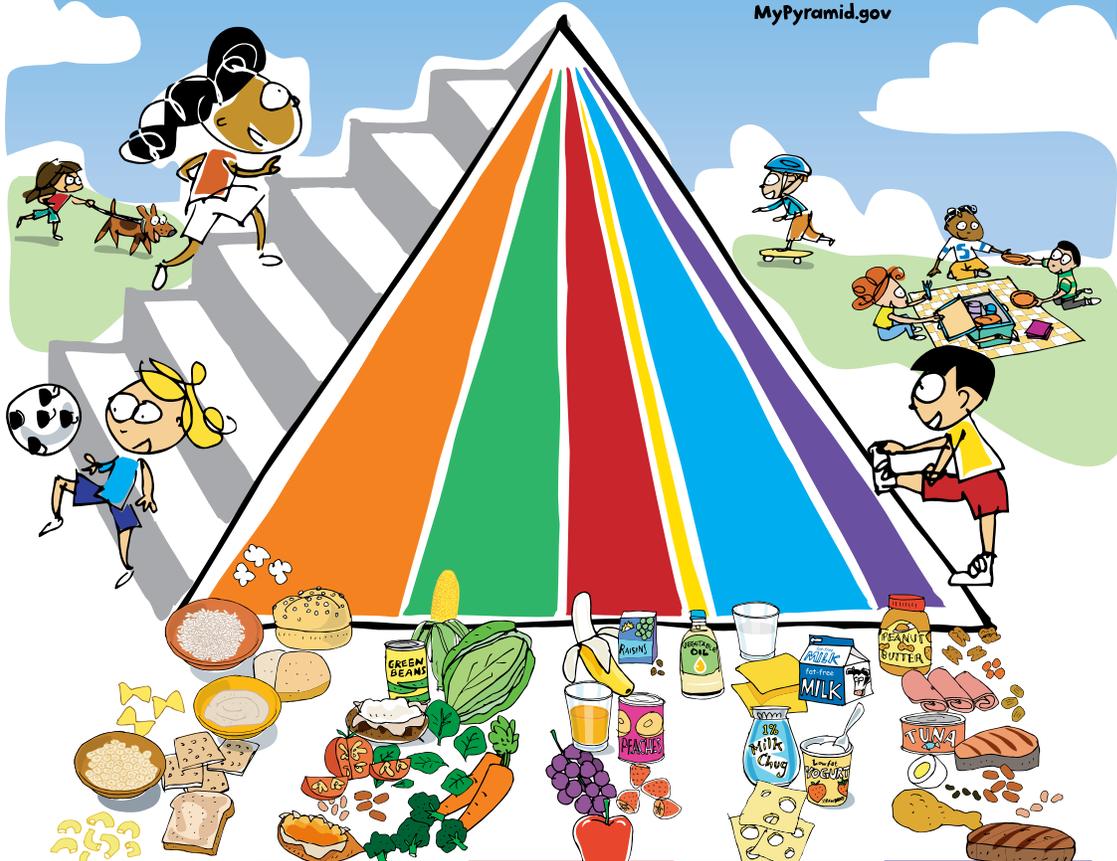
MyPyramid Poster

http://teamnutrition.usda.gov/resources/mpk_poster2.pdf



MyPyramid

Eat Right. Exercise Have Fun.
MyPyramid.gov



Grains	Vegetables	Fruits	Milk	Meat & Beans
<p>Make half your grains whole</p> <p>Start smart with breakfast. Look for whole-grain cereals.</p> <p>Just because bread is brown doesn't mean it's whole-grain. Search the ingredients list to make sure the first word is "whole" (like "whole wheat").</p>	<p>Vary your veggies</p> <p>Color your plate with all kinds of great-tasting veggies.</p> <p>What's green and orange and tastes good? Veggies! Go dark green with broccoli and spinach, or try orange ones like carrots and sweet potatoes.</p>	<p>Focus on fruits</p> <p>Fruits are nature's treats – sweet and delicious.</p> <p>Go easy on juice and make sure it's 100%.</p>	<p>Get your calcium-rich foods</p> <p>Move to the milk group to get your calcium. Calcium builds strong bones.</p> <p>Look at the carton or container to make sure your milk, yogurt, or cheese is lowfat or fat-free.</p>	<p>Go lean with protein</p> <p>Eat lean or lowfat meat, chicken, turkey, and fish. Ask for it baked, broiled, or grilled – not fried.</p> <p>It's nutty, but true. Nuts, seeds, peas, and beans are all great sources of protein, too.</p>
<p>For an 1,800-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.</p>				
<p>Eat 6 oz. every day; at least half should be whole</p>	<p>Eat 2 1/2 cups every day</p>	<p>Eat 1 1/2 cups every day</p>	<p>Get 3 cups every day; for kids ages 2 to 8, it's 2 cups</p>	<p>Eat 5 oz. every day</p>
<p>Oils Oils are not a food group, but you need some for good health. Get your oils from fish, nuts, and liquid oils such as corn oil, soybean oil, and canola oil.</p>				
<p>Find your balance between food and fun</p> <ul style="list-style-type: none"> Move more. Aim for at least 60 minutes everyday, or most days. Walk, dance, bike, rollerblade – it all counts. How great is that! 		<p>Fats and sugars – know your limits</p> <ul style="list-style-type: none"> Get your fat facts and sugar smarts from the Nutrition Facts label. Limit solid fats as well as foods that contain them. Choose food and beverages low in added sugars and other caloric sweeteners. 		



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Soft Drinks and Oral Health

http://www.msdh.state.ms.us/msdhsite/_static/43,2809,151.html

Soft drink consumption is one of several leading causes of tooth decay. Carbonation, sugar and acids in soft drinks weaken tooth enamel and encourage the growth of bacteria that contribute to tooth decay. Get the facts on how tooth decay starts and what you can do to prevent it.

How Tooth Decay Starts

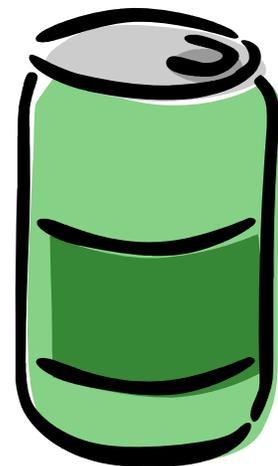
- Sugar in soda combines with bacteria in your mouth to form acid.
- This acid, plus the extra acid from soft drinks, attacks the teeth. Each acid attack lasts about 20 minutes, and acid attacks start over again with every sip.
- Ongoing acid attacks weaken tooth enamel.
- Cavities begin when tooth enamel is weakened or damaged.
- Remember, diet or “sugar-free” soda still has acid that can harm your teeth. Although fruit drinks aren’t carbonated like soda, they too have acid and sugar that can cause decay.

Reduce the Risk

- Drink carbonated beverages (soft drinks, soda pop) in moderation.
- Give infants and toddlers these beverages in a regular cup. Sucking on a bottle or sippy cup filled with these beverages promotes tooth decay.
- Use a straw to help keep sugar away from your teeth while drinking.
- Choose fluoridated water instead of fizzy drinks.
- Avoid drinking soft drinks and fruit juice before bedtime.
- Rinse your mouth with water or brush your teeth soon after using either of these.
- Get regular dental checkups and cleanings.

Acid and Sugar in Soft Drinks

	Acidity	Sugar Amount
Battery Acid	6	0
Pepsi	4.5	9.8 tsp.
Coca-Cola	4.5	9.3 tsp.
Minute Maid Orange Soda	4.2	11.2 tsp.
Dr. Pepper	4	9.5 tsp.
Gatorade	4	3.3 tsp.
Nestea	4	5.0 tsp.
Diet Pepsi	4	0
Mountain Dew	3.7	11.0 tsp.
Minute Maid Grape Soda	3.7	11.9 tsp.
Diet Coke	3.6	0
Diet Dr. Pepper	3.6	0
Sprite	3.6	9.0 tsp.
Barq’s	2.4	10.7 tsp.
Pure Water	0	0



Master Copy #19

Fourth Grade: Class Activity 1

How Sweet Is It?

www.hsph.harvard.edu/nutritionsource/healthy-drinks/how-sweet-is-it/index.html

Calories and teaspoons of sugar in 12 ounces of each beverage:



For more information, see The Nutrition Source:

www.hsph.harvard.edu/nutritionsource/healthy-drinks/how-sweet-is-it/index.html

Master Copy #4

Fourth Grade: Class Activity 1

25 Healthy Snacks for Kids

www.eatright.org/public/content.aspx?id=206

1. Peel a banana and dip it in yogurt. Roll in crushed cereal and freeze.
2. Spread celery sticks with peanut butter or low-fat cream cheese. Top with raisins. Enjoy your “ants on a log.”
3. Stuff a whole-grain pita pocket with ricotta cheese and Granny Smith apple slices. Add a dash of cinnamon.
4. Mix together ready-to-eat cereal, dried fruit and nuts in a sandwich bag for an on-the-go snack.
5. Smear a scoop of frozen yogurt on two graham crackers and add sliced banana to make a yummy sandwich.
6. Top low-fat vanilla yogurt with crunchy granola and sprinkle with blueberries.
7. Microwave a small baked potato. Top with reduced-fat cheddar cheese and salsa.
8. Make snack kabobs. Put cubes of low-fat cheese and grapes on pretzel sticks.
9. Toast a whole grain waffle and top with low-fat yogurt and sliced peaches.
10. Spread peanut butter on apple slices.
11. Blend low-fat milk, frozen strawberries and a banana for thirty seconds for a delicious smoothie.
12. Make a mini-sandwich with tuna or egg salad on a dinner roll.
13. Sprinkle grated Monterey Jack cheese over a corn tortilla; fold in half and microwave for twenty seconds. Top with salsa.
14. Toss dried cranberries and chopped walnuts in instant oatmeal.



continued

15. Mix together peanut butter and cornflakes in a bowl. Shape into balls and roll in crushed graham crackers.
16. Microwave a cup of tomato or vegetable soup and enjoy with whole grain crackers.
17. Fill a waffle cone with cut-up fruit and top with low-fat vanilla yogurt.
18. Sprinkle grated Parmesan cheese on hot popcorn.
19. Banana Split: Top a banana with low-fat vanilla and strawberry frozen yogurt. Sprinkle with your favorite whole-grain cereal.
20. Sandwich Cut-Outs: Make a sandwich on whole grain bread. Cut out your favorite shape using a big cookie cutter. Eat the fun shape and the edges, too!
21. Spread mustard on a flour tortilla. Top with a slice of turkey or ham, low-fat cheese and lettuce. Then roll it up.
22. Mini Pizza: Toast an English muffin, drizzle with pizza sauce and sprinkle with low-fat mozzarella cheese.
23. Rocky Road: Break a graham cracker into bite-size pieces. Add to low-fat chocolate pudding along with a few miniature marshmallows.
24. Inside-Out Sandwich: Spread mustard on a slice of deli turkey. Wrap around a sesame breadstick.
25. Parfait: Layer vanilla yogurt and mandarin oranges or blueberries in a tall glass. Top with a sprinkle of granola.

Now that you are refueled, take a trip to Planet Power. Play the MyPyramid Blast-Off game at www.mypyramid.gov.

Dip it! Bonus Snacks

- Dip baby carrots and cherry tomatoes in low-fat ranch dressing.
- Dip strawberries or apple slices in low-fat yogurt.
- Dip pretzels in mustard.
- Dip pita chips in hummus.
- Dip graham crackers in applesauce.
- Dip baked tortilla chips in bean dip.
- Dip animal crackers in low-fat pudding.
- Dip bread sticks in salsa.
- Dip a granola bar in low-fat yogurt.
- Dip mini-toaster waffles in cinnamon applesauce.

For a referral to a registered dietitian and for additional food and nutrition information visit www.eatright.org.



The American Dietetic Association is the world's largest organization of food and nutrition professionals. ADA is committed to improving the nation's health and advancing the profession of dietetics through research, education and advocacy.

This tip sheet is provided by:

Authored by American Dietetic Association staff registered dietitians.

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Fourth Grade: Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Class Activity 2: Effects of Sugar

Time Needed: 1 hour

Materials Needed:

- One cardboard tri-fold display board
- Velcro strips or dots with adhesive back
- Four sheets of different colored 8½ x 11” paper
- One sugar conversion chart (4 grams of sugar = 1 teaspoon of sugar)
- One 5 lbs. sack of sugar
- One teaspoon measure
- One box of Ziploc sandwich baggies (each student needs one baggie)
- One empty 16 oz. can of soda pop
- One empty 16 oz. bottled water
- One 1.55 oz. candy bar or the empty wrapper
- One 1.55 oz. granola bar or the empty wrapper
- Master Copy #20: *It's Math Time* (make one copy for each student or write math problem on the board)
- Parent or guardian letter for each student
- Unit 4 Teacher Background Information

Objectives for Student Learning

- Understand the role of sugar in the decay process
- Identify how much sugar student consumes in soft drinks and snacks per day
- Demonstrate how to convert grams of sugar to teaspoons

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following question:

	Poor	Fair	Good
How do you find out how much sugar is in your snack?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What will eating too much sugar do to your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 4 Teacher Background Information with students. Allow time for discussion.
- The day before teaching the lesson, assign students a take-home activity:
Ask students to identify their favorite snack and beverage. Ask them to bring to class an empty beverage container (pop can, bottled juice, or similar) and an empty snack wrapper. For example, a cereal box label, candy bar wrapper, or fruit roll-up wrapper.
- Paste the sheets of colored paper to the tri-fold display board.
- Stick two dots of Velcro to the back of each product.
- Place matching size dots on display board so that the Velcro dots on the product will stick to the Velcro dots on the board.

- Read the product labels for grams of sugar.
- Use the conversion chart and do the math.
- Measure the number of teaspoons of sugar for each product into a baggie.
- Put Velcro dots on the baggies and place Velcro dots to match on the display board so that products and baggies of sugar correspond.
- Give each student a sandwich baggie.
- Ask students to read the label of their favorite product. Make the mathematical conversion. Divide the number of grams of sugar by 4 = 1 teaspoon of sugar. Write the answer on a piece of paper.

Example: Chocolate Granola Dipps (1 bar)

$$15 \text{ grams of sugar} \div 4 = 3\frac{3}{4} \text{ teaspoons of sugar}$$

Measure the amount of sugar corresponding to the grams of sugar. Place it in their baggie.

- Have the students take their sugar baggie and product label home to share with the family. (Optional)
- Give students *Master Copy #20: It's Math Time* (or write the math problem on the board). Discuss with the class and allow students time to complete the math mystery.

Additional Discussion

- Bacteria + Sugar = Acid
Acid destroys tooth enamel by removing calcium, which leads to cavities. Cavities are holes in the teeth that can grow deeper into the other parts of the tooth.
- Choose healthy foods instead of sugary snacks. Good eating habits and routine visits to a dentist can help prevent tooth decay.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 4 (Appendix C) to send home with each student. Please circle the subject(s) you covered in today's lesson.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
How do you find out how much sugar is in your snack?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What will eating too much sugar do to your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Master Copy #20

Fourth Grade: Class Activity 2

It's Math Time

http://fha.maryland.gov/pdf/oralhealth/cdhm_activity_math_eng.pdf

Can you help Flossy find the answer to this math mystery?
Follow the clues below to get the answer!

20 minutes - this is how long acids can attack your teeth each time you have sugary foods or drinks. If you have two sugary treats every day, how long have your teeth been attacked by acids at the end of a year?

20 X 2 sugary drinks or snacks per day =

X 7 days per week =

X 4 weeks per month =

X 12 months per year =

÷ 60 minutes in an hour = hours per year!

Limit sugary foods and drinks!
When your tooth enamel is eaten away
by acids, it doesn't grow back!



Answer 224 hours

Essential Academic Learning Requirements

Fourth Grade, Unit 4: Preventing Tooth Decay

This unit meets the following Washington State Essential Academic Learning Requirements:

Reading

EALR1: The student understands and uses different skills and strategies to read.

EALR 2: The student understands the meaning of what is read.

EALR 3: The student reads different materials for a variety of purposes.

Communication

EALR 1: The student uses listening and observation skills and strategies to focus attention and interpret information.

EALR 2: The student uses communication skills and strategies to interact/work effectively with others.

Mathematics

EALR 4: The student uses reasoning, problem solving, and communication.

Science

EALR 1: Complex systems.

EALR 2: Planning investigations.

EALR 4: Structures and functions of living organisms.

Writing

EALR 2: Student writes in a variety of forms for different audiences and purposes.

Health and Fitness

EALR 1: Student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.

EALR2: Student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.

EALR 3: Student analyzes and evaluates the impact of real-life influences on health.

EALR 4: Student effectively analyzes personal information to develop individualized health and fitness plans.

Essential Academic Learning Requirements

Tooth Tutor
Class Activities for Elementary School
(Grades 1–5)
Fifth Grade

Fifth Grade: Tobacco, Alcohol, and Illicit Drugs

Class Activity 1: Effects of Tobacco on the Body

Time Needed: 15 minutes

Materials Needed:

Master Copy #21: *The Effects of Tobacco on the Body*
Master Copy #22: *The Impact of Tobacco on the Body and the Mouth*
Master Copy #23: *What Is In a Cigarette?*
Box of new, unused drinking straws
Parent/Caregiver Information Letter for each student
Unit 6 Teacher Background Information

Objectives for Student Learning

- Describe how tobacco impacts the body
- Describe the effects of spit tobacco
- Recognize what emphysema is and how it may feel
- Identify ingredients in a cigarette

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
What are the physical effects of tobacco on the body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does spit tobacco affect your body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does tobacco affect the mouth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What harmful chemicals are found in a cigarette?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 6 Teacher Background Information with students. Allow time for discussion.
- Discuss with students the effects that tobacco has on the body.
- Distribute and discuss the Master Copies.

Restricted Breathing Exercise

- Give each student a straw and ask them to stand next to their desk with the straw in their hand.
- When you say “Begin,” students are to run in place as fast as they can for one minute.
- When you say “Time,” students are to stop running in place, put the straw in their mouth, plug their nose, and begin breathing through the straw.
- This will simulate how a person with emphysema feels when they are winded and cannot seem to get enough air. Emphysema is a disease that is caused by prolonged smoking.
- Discuss with the class how it felt to breathe during the straw exercise. Ask the students if they can describe what it might feel like to have emphysema.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 6 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
What are the physical effects of tobacco on the body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does spit tobacco affect your body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does tobacco affect the mouth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What harmful chemicals are found in a cigarette?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Effects of Tobacco on the Body

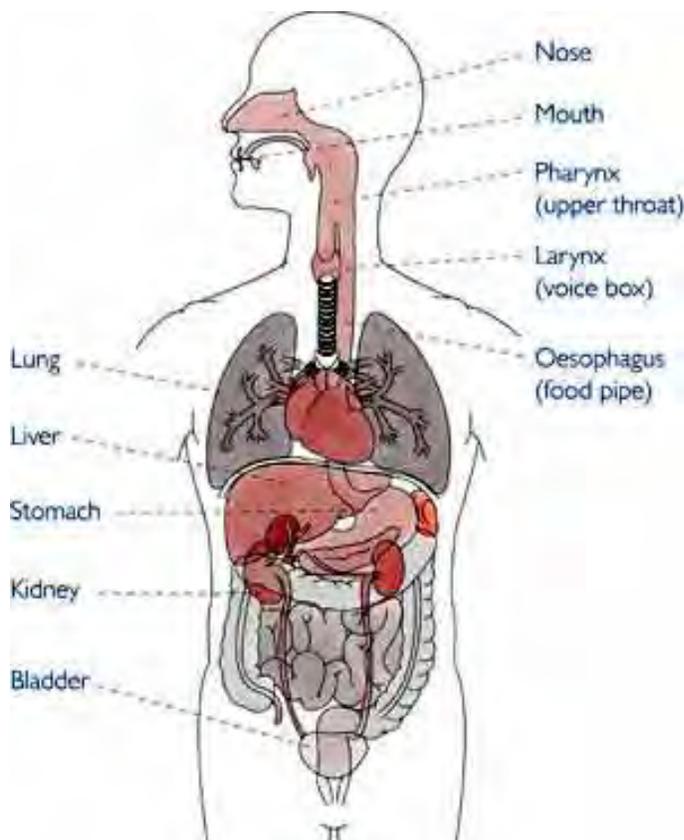
**Brain • Heart • Lungs • Skin • Fingers • Mouth
Teeth • Throat • Stomach • Colon • Bladder**



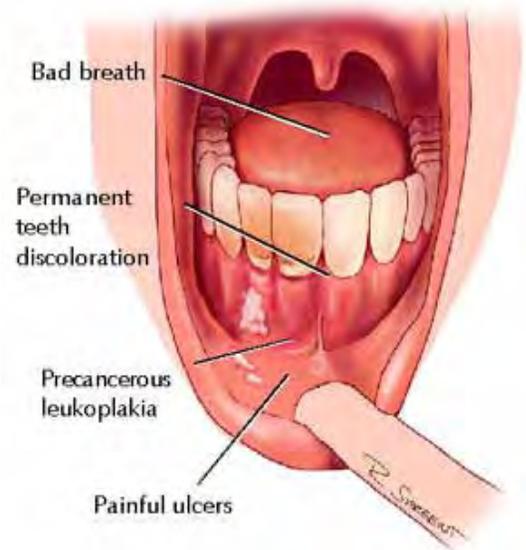
The Impact of Tobacco on the Body and the Mouth

Many believe that nicotine is what causes mouth cancer and other smoking-related cancers. In fact, it only causes the addiction to smoking. Cancer originates from the presence of the carcinogens in cigarette smoke. The heat from smoke is another contributing factor to cancer.

Effects of tobacco on the body:



Effects of smokeless tobacco in the mouth:

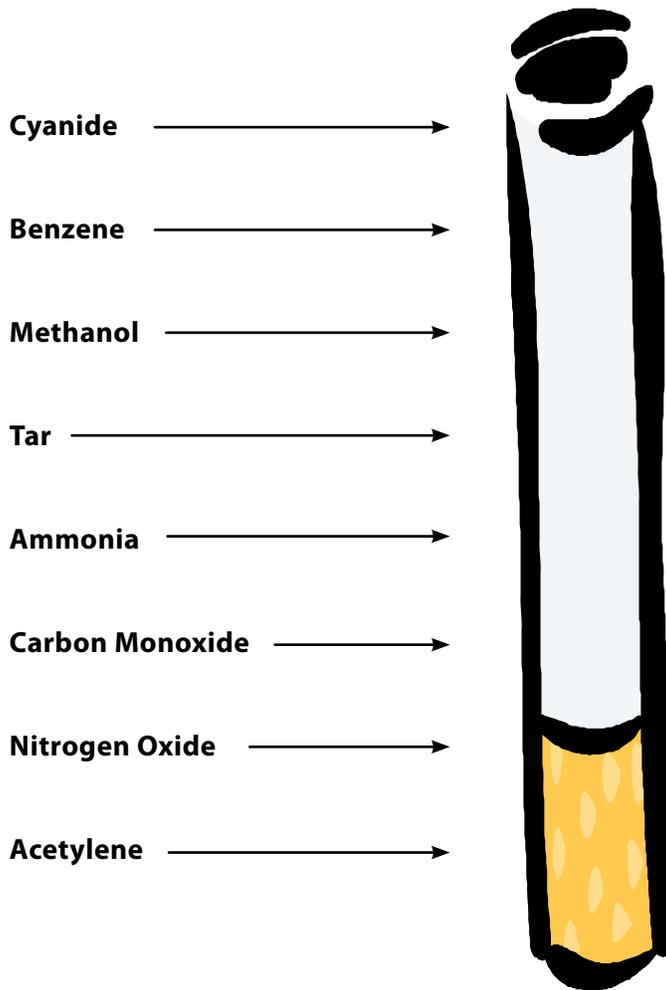


Master Copy #23

Fifth Grade: Class Activity 1

What Is In a Cigarette?

According to the Centers for Disease Control and Prevention there are more than 4,000 known chemicals in cigarettes, including cyanide, arsenic, and formaldehyde.



Source: Centers for Disease Control and Prevention
(www.cdc.gov/HealthMarketing/entertainment_education/tips/tobacco_gnrl.htm)

Class Activity 2: Tobacco Advertisement

Time Needed: 50 minutes

Materials Needed:

Cigarette advertisements from a variety of magazines
Master Copy #24: *Tobacco Advertising Strategies*
Master Copy #25: *Cigarette Advertisements*
Materials for creating a poster (poster paper, glue, tape, scissors, markers, etc.)
Parent/Caregiver Information Letter for each student
Unit 6 Teacher Background Information

Objectives for Student Learning

- Understand how advertising increases tobacco use
- Describe advertising strategies used for tobacco

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
How does advertising encourage the use of tobacco?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What strategies do advertisers use for tobacco?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

Review Unit 6 Teacher Background Information with students. Allow time for discussion.

Advertising for Tobacco

- Begin the activity with a discussion about the dangers of smoking.
- Discuss why students think people choose to smoke.
- Bring up the subject of advertising. How do advertising companies influence one's decision to smoke?
 - ◆ Explain that advertisers use different strategies to sell products.
 - ◆ Using Master Copy #24 *Tobacco Advertising Strategies*, record the different strategies on a white board or overhead projector and briefly describe what each strategy means.
 - ◆ Strategies include bandwagon, fact versus opinion, fantasy, humor, sensory appeal, statistics, and testimonial.
- Divide the class into groups and assign each group a strategy.
 - ◆ Share Master Copy #25 *Cigarette Advertisements* with the class and discuss popular cigarette advertisements.
 - ◆ Ask groups to look through magazines or the internet for cigarette advertisements that represent their strategy.
 - ◆ Ask students to create an advertisement of their own using a particular strategy.
- When groups have finished, ask each group to present their advertisement and talk about the strategy used for their advertisement.

- Explain to students that knowing how cigarette advertisements are created may help them make better decisions about smoking.

Display

- Ask students to share their advertisement with rest of the group. Display advertisements in classroom.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 6 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
How does advertising encourage the use of tobacco?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What strategies do advertisers use for tobacco?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOOTH TRIVIA

Did you know?
Interesting Facts of History
Paul Revere was a dentist.

Source: Michigan Dental Association (www.smilemichigan.com)



Tobacco Advertising Strategies

www.media-awareness.ca/english/resources/educational/handouts/tobacco_advertising/tricks_of_the_trade.cfm

The Cool Factor

By associating celebrities and “ideal” people with fun, excitement, and attitude, tobacco advertisers work hard to convince consumers that if they don’t smoke, they’re not cool. (There’s even a brand of cigarette called “Kool”!)

Celebrity Smokers

Although tobacco companies can’t use celebrity spokespeople in their ads, researchers have noted an increase in smoking by characters in movies – especially movies with teen appeal. Magazine photos of musicians, models, and actors smoking also promote the idea that smoking is glamorous.

Dreams and Insecurities

Tobacco advertisers use different strategies to attract males and females. Cigarette ads geared to young women play on the idea of being “liberated” and in control – while at the same time playing on insecurities about body image. Brands geared towards women often have words like “slim” or “slender” in the product name, or use extremely thin models in their ads. Cigarette ads geared to young men use rugged, independent, masculine-looking models, such as the classic image of the Marlboro Man. These models are usually shown participating in sports or outdoor activities, or surrounded by beautiful women.

Facts and Figures

Tobacco advertisers have been known to use statistics and “pseudo-science” to give the impression that smoking is safe and to enhance their products’ credibility.

Friends, Fun, and Excitement

Tobacco ads feed the notion that everyone smokes – and has lots of fun while doing it. Images of happy smokers at parties, in restaurants, and even in the “great outdoors” reinforce the connection between smoking and good times.

Humor

Tobacco ads often use tongue-in-cheek humor to attract customers. Because smoking is becoming less acceptable in society, humor in tobacco ads frequently pokes fun at non-smokers, or at those who feel that smoking is unhealthy.

Ideal People

Models in tobacco ads appear to be perfect. They’re usually fit, attractive, and cool-looking. Women in tobacco ads tend to be sexy and alluring, while the men are tough and masculine.

Individuality

Tobacco ads – especially those that try to attract young people – often portray smoking as a sign of independence and rebellion. The Virginia Slims slogan “Find your own voice” is an example of this strategy.

Omission

It's no secret that tobacco advertisers don't give you the full story about cigarettes. It is rare to see a cancer patient or a person with lung disease in a tobacco advertisement.

Positive Lifestyle Advertising

Cigarette firms have long used "pictures of health" in cigarette ads to foster smoking as an acceptable, healthy lifestyle. Ads like these want consumers to associate smoking with outdoor sport and recreational activities such as tennis, bicycling, sailing, and horseback riding.

Product Placement

Cigarette ads can pop up in the most unusual places, such as video games. This is especially true of racing or driving games, where players drive by virtual "billboards" advertising cigarettes.

Retail Promotion

The tobacco industry pays stores to exhibit counter-top displays and promotional posters for tobacco products and events. Smaller convenience stores are most likely to promote tobacco products in this way. A 1998 AC Nielsen study, conducted for Health Canada, found that convenience stores and pharmacies were more likely to carry counter-top displays and other promotions when the stores were located close to schools and malls.

Scale

Tobacco advertisers will often use tricks of scale to make their product look bigger – and hence more appealing.

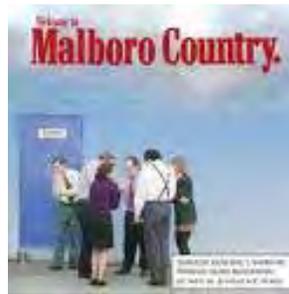
Sponsorship

Although Canadian tobacco advertisers are no longer allowed to sponsor events, they are still permitted to do so in many countries around the world, including the United States. Sponsorship is very appealing to tobacco companies. If you want to associate your product with daring, speed, and wealth, what better way than to sponsor a race car driver – splashing your logo on his car, uniform, and helmet? If you want your product to epitomize "cool," why not sponsor a jazz or blues singer?

Master Copy #25

Fifth Grade: Class Activity 2

Cigarette Advertisements



Essential Academic Learning Requirements

Fifth Grade, Unit 6: Tobacco, Alcohol, and Illicit Drugs

This unit meets the following Washington State Essential Academic Learning Requirements:

Reading

- EALR 1: The student understands and uses different skills and strategies to read.
- EALR 2: The student understands materials read.
- EALR 3: The student reads different materials for a variety of purposes.

Communication

- EALR 1: The student uses listening and observation skills and strategies to gain understanding.
- EALR 2: The student uses communication skills and strategies to interact/work effectively with others.
- EALR 3: The student uses communication skills and strategies to effectively present ideas and one's self in a variety of situations.
- EALR 4: The student analyzes and evaluates the effectiveness of communication.

Writing

- EALR 1: The student understands and uses a writing process.
- EALR 2: The student writes in a variety of forms for different audiences and purposes.
- EALR 3: The student writes clearly and effectively.
- EALR 4: The student analyzes and evaluates the effectiveness of written work.

Health and Fitness

- EALR 1: The student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.
- EALR 2: The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.
- EALR 3: The student analyzes and evaluates the impact of real-life influences on health.
- EALR 4: The student effectively analyzes personal information to develop individualized health and fitness plans.

Mathematics

- EALR 5.5: Numbers, Data/Statistics/Probability
- EALR 5.6: Reasoning, problem solving, and communication

Science

- EALR 2: Inquiry: Questioning and Investigating
- EALR 3: Science Technology and Problem Solving

Essential Academic Learning Requirements

Tooth Tutor
Class Activities for Middle School
and High School
(Grades 6–12)

Grade 6 –12: Teen Oral Health

Class Activity 1: Oral Implications for Teens

Time Needed: 50 minutes

Materials Needed:

Newsprint or construction paper, large enough for a collage or picture
 Popular magazines, newspapers, and the Internet to use as source material
 Markers or drawing pens
 Master Copy #26: *Oral Piercing Fact Sheet*
 Parent/Caregiver Information Letter for each student
 Unit 8 Teacher Background Information

Objectives for Student Learning

- Understand the complexity of eating disorders and how they affect oral health
- Understand how nutrition and frequency of snacking affects oral health ←
- Understand the danger of oral piercings in relation to oral health
- Understand the need for protective gear
- Identify positive behaviors to counter media advertisements ←

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
How does nutrition affect your oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do eating disorders affect your oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do oral piercings affect your oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What are safe ways to guard your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What messages do the media give about food and physical beauty?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 8 Teacher Background Information with students. Allow time for discussion.
- Discuss teen oral health issues with the class. Students may mention actors, athletes, and other public figures identified as having eating disorders. Take this opportunity to define any terms the class is unsure about and correct any misconceptions they have.
- Brainstorm reasons teen issues are so prevalent in our society. For example, food is abundant, and certain body shapes are valued.
- Discuss the oral health complications that often result from eating disorders, poor nutrition, oral piercings (see Master Copy #26: *Oral Piercing Fact Sheet*), and not using safety and protective gear.
- Divide the class into five groups and have them look through magazines, newspapers, and the internet to find examples of conflicting messages about their topic. For example, they may find ads for high-calorie foods or an “all you can eat” restaurant, as well as fashion articles with overly thin models. Encourage them to

think of their own examples, such as the many exercise programs on cable television and the gourmet-cooking channels. They may cite ads for cosmetic surgery that claim to improve how people appear.

- After students have compiled 5–10 powerful mixed messages, have each group create a “Mixed Messages” poster. Focus on the volume of messages we receive in our daily lives about food and appearances, oral piercings, and injury prevention. Students can make a collage by cutting out materials from newspapers, magazines, or create an original drawing in which they compare these mixed messages. Display finished products for the class.
- Conclude by asking students how they can help themselves to counteract the effect of these mixed messages and avoid conditions that trigger poor oral health habits.
- Examples of positive behaviors may include these:
 - ◆ Recognizing the contradictory messages that are constantly before them in our society.
 - ◆ Appreciating themselves and others for traits and talents that are not wrapped up in physical appearance or image.
 - ◆ Practicing good nutritional habits.
 - ◆ Trying to achieve a balance in their lives so they do not place too much importance on any one thing.
 - ◆ Taking part in activities that they enjoy and that help boost their confidence and self-image.
 - ◆ Adopting habits that alleviate stress and anxiety in their lives.
 - ◆ Relying on the help of a network of nurturing individuals, such as family, friends, and professionals at school, when they are faced with personal problems they feel are too large to handle on their own.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 8 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
How does nutrition affect your oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do eating disorders affect your oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do oral piercings affect your oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What are safe ways to guard your teeth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What messages do the media give about food and physical beauty?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Oral Piercing Fact Sheet

www.odh.ohio.gov/ASSETS/OEBEE96611C34DCF9C3AE7617CAB0424/factsht_oral%20piercing.pdf

Most dentists discourage oral piercing due to the many risks involved. Some of the risks are:

Infection—touching mouth jewelry can lead to infection and can be life threatening.

Bleeding—damage to the tongue’s blood vessels during piercing can cause blood loss that is serious.

Swelling, pain and nerve damage—swelling and pain are common after piercing. Your tongue could swell so much that it blocks your airway. It’s possible to puncture a nerve during tongue piercing and cause permanent damage.

Damage to the teeth—the jewelry can chip, crack or scratch your teeth causing permanent damage. It can also damage crowns or fillings.

Damage to the gums—the jewelry can injure the gums causing them to pull away from the tooth. Once that happens, your gums will not grow back.

Blood-borne diseases—hepatitis B, C, D and G; syphilis; tetanus; and tuberculosis could be transmitted to you.

Allergic response (to the metals in the jewelry)—you may be allergic to the metal used in the jewelry.

For more information on the risks of oral piercing visit <http://www.agd.org> or <http://www.ada.org>



Essential Academic Learning Requirements

Unit 8, Sixth Grade – High School: Teen Oral Health

This unit meets the following Washington State Essential Academic Learning Requirements:

Writing

- EALR 1: The student understands and uses a writing process.
- GLE 1.1 Analyzes and selects effective strategies for generating ideas and planning writing.
 - GLE 1.5.1 Publishes in a format that is appropriate for specific audiences and purposes.
- EALR 2: The student writes in a variety of forms for different audiences and purposes.
- EALR 3: The student writes clearly and effectively.

Reading

- EALR 1: The student understands and uses different skills and strategies to read.
- EALR 2: The student understands the meaning of materials read.
- EALR 3: The student uses different materials for a variety of purposes.

Social Studies

- EALR 5: The student understands and applies reasoning skills to conduct research, deliberate, form, and evaluate positions through the processes of reading, writing, and communicating.

Communication

- EALR 1: The student uses listening and observation skills and strategies to gain understanding.
- EALR 2: The student uses communication skills and strategies to interact/work effectively with others.
- EALR 3: The student uses communication skills and strategies to effectively present ideas and one's self in a variety of situations.
- 3.1: Uses knowledge of topic/theme, audience, and purpose to plan presentations.
 - 3.2: Uses media and other resources to support presentations.

Science

- EALR 1: Systems
- EALR 2: Inquiry
- EALR 4: Life Science: Evaluate how lifestyle choices and environments (e.g., tobacco, drug, and alcohol use, amount of exercise, quality of air, and kinds of food) affect parts of the human body and the organism as a whole.

Health and Fitness

- EALR 1: The student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.
- 1.5: Understands relationship of nutrition and food nutrients to body composition and physical performance.
- EALR 2: The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.
- 2.1: Understands foundations of health.
 - 2.2: Understands stages of growth and development.
 - 2.2.4 Analyzes benefits of maintaining a balance of healthy habits (stress, sleep, exercise, nutrition, recreation, and school).
 - 2.4: Acquires skills to live safely and reduce health risks.
 - 2.4.1 Understands abusive and risky situations and demonstrates safe behaviors to prevent injury to self and others at home, school, and in the community.
- EALR 3: The student analyzes and evaluates the impact of real-life influences on health.
- 3.1: Understands how family, culture, and environmental factors affect personal health.
 - 3.3: Evaluates the impact of social skills on health.

Essential Academic Learning Requirements

Grade 6 –12: The Mouth is Important to the Body

Class Activity 2: Sugar and Oral Health

Time Needed: 50 minutes

Materials Needed:

- Master Copy #27: *MyPyramid Worksheet*
- Master Copy #19: *How Sweet Is It?*
- Master Copy #18: *Soft Drinks and Oral Health*
- Master Copy #28: *Girl Body Mass Index*
- Master Copy #29: *Boy Body Mass Index*
- Parent/Caregiver Information Letter for each student
- Unit 9 Teacher Background Information

Objectives for Student Learning

- Understand how sugar impacts oral and overall body health
- Understand how sugar affects the decay process
- Identify and choose healthy snacks and beverages
- Demonstrate how to determine Body Mass Index (BMI)

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
How does sugar impact your oral health and overall body health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does sugar contribute to the tooth decay process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do you know if a snack is healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do you calculate Body Mass Index (BMI)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 9 Teacher Background Information with students. Allow time for discussion.
- Share Master Copy #27: *MyPyramid Worksheet* with students. Ask them to list their daily intake of snacks and beverages on the worksheet.
- Give students Master Copy #19 *How Sweet Is It?* and ask them to determine how many sugar calories they consume in drinks each day. Discuss ways to limit sugar intake. Discuss how Bacteria + Sugar = Acid.
- Distribute Master Copy #18: *Soft Drinks and Oral Health*. Discuss the impact of drinking too many soft drinks and things to do to reduce the risk.
- Distribute Master Copies #28 and #29: *Girl Body Mass Index* and *Boy Body Mass Index* to each student. The Body Mass Index (BMI) is a measurement tool that compares your height to your weight, and gives you an indication of whether you are overweight, underweight, or at a healthy weight for your height. BMI is based on federal guidelines released by the National Heart, Lung & Blood Institute. BMI is helpful in determining health risks and appropriate interventions. The normal range is 19–25 for female students and 20–25 for male students. To calculate a student's BMI: $\text{Weight} \div \text{height} \div (\text{height} \times 703)$

- Remind students that sugar feeds bacteria in your mouth, which produces excess acid. Acid removes calcium from tooth enamel, which leads to cavities. The average acid attack lasts 20–40 minutes after each meal or beverage. Eating or drinking too often leads to demineralization of the enamel and cavities.
- Encourage students to choose healthy foods instead of sugary snacks. Good eating habits and routine visits to a dentist can help prevent tooth decay.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 9 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

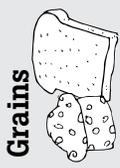
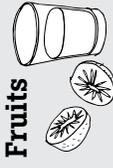
	Poor	Fair	Good
How does sugar impact your oral health and overall body health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How does sugar contribute to the tooth decay process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do you know if a snack is healthy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How do you calculate Body Mass Index (BMI)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MyPyramid Worksheet

MyPyramid FOR KIDS

Name: _____

Check how you did yesterday and set a goal to aim for tomorrow

Write In Your Choices From Yesterday	Food and Activity	Tip	Goal (Based On a 1800 Calorie Pattern)	List Each Food Choice In Its Food Group*	Estimate Your Total
Breakfast:	Grains 	Make at least half your grains whole grains.	6 ounce equivalents (1 ounce equivalent is about 1 slice bread, 1 cup dry cereal, or 1/2 cup cooked rice, pasta, or cereal)		____ ounce equivalents
Lunch:	Vegetables 	Color your plate with all kinds of great tasting veggies.	2 1/2 cups (Choose from dark green, orange, starchy, dry beans and peas, or other veggies).		____ cups
Snack:	Fruits 	Make most choices fruit, not juice.	1 1/2 cups		____ cups
Dinner:	Milk 	Choose fat-free or lowfat most often.	3 cups (1 cup yogurt or 1 1/2 ounces cheese = 1 cup milk)		____ cups
	Meat and Beans 	Choose lean meat and chicken or turkey. Vary your choices—more fish, beans, peas, nuts, and seeds.	5 ounce equivalents (1 ounce equivalent is 1 ounce meat, chicken or turkey, or fish, 1 egg, 1 T. peanut butter, 1/2 ounce nuts, or 1/4 cup dry beans)		____ ounce equivalents
Physical activity:	Physical Activity 	Build more physical activity into your daily routine at home and school.	At least 60 minutes of moderate to vigorous activity a day or most days.		____ minutes

* Some foods don't fit into any group. These "extras" may be mainly fat or sugar—limit your intake of these.

How did you do yesterday? Great So-So Not So Great

My food goal for tomorrow is: _____

My activity goal for tomorrow is: _____

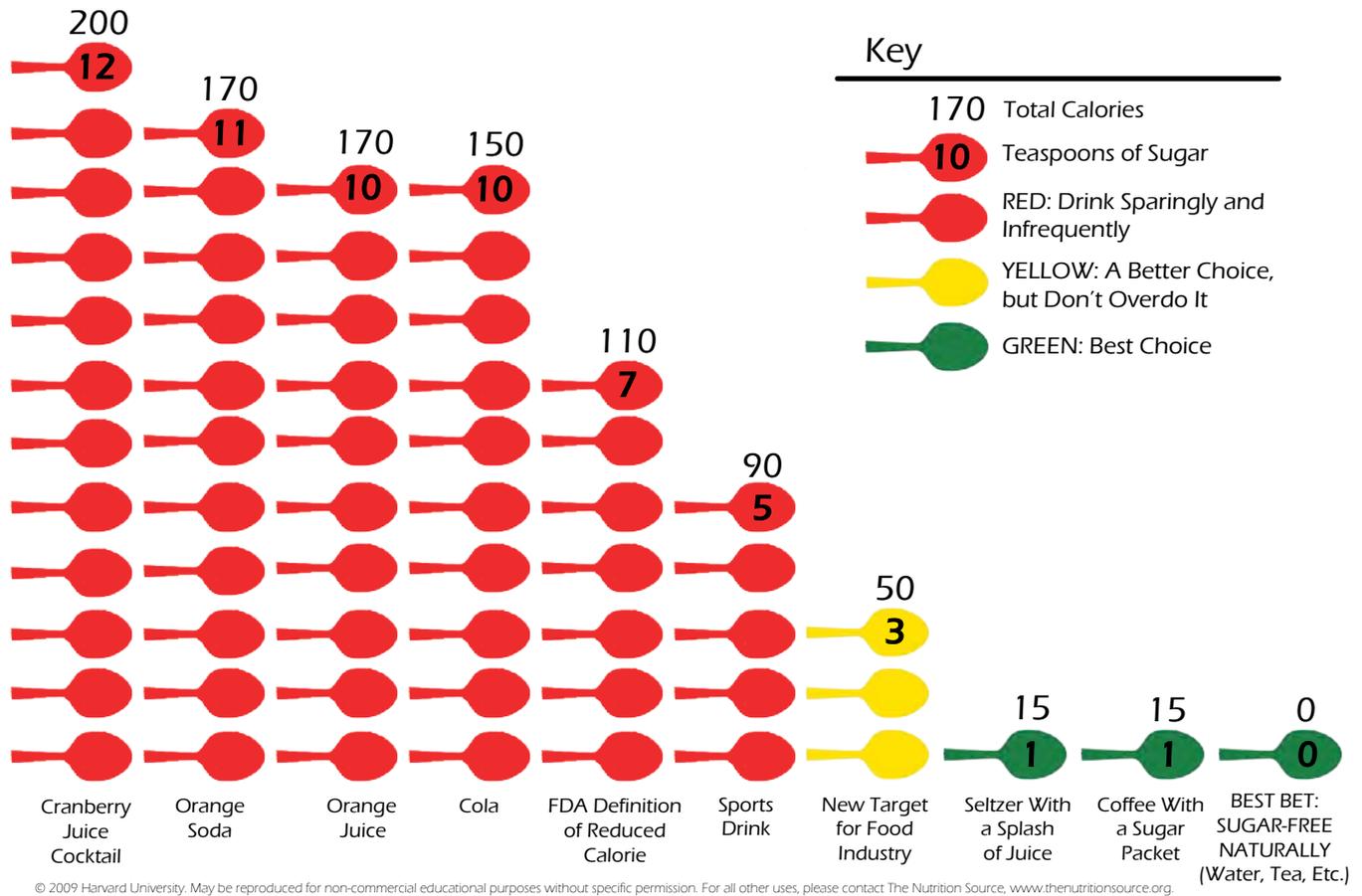
Master Copy #19

Grades 6–12: Class Activity 2

How Sweet Is It?

www.hsph.harvard.edu/nutritionsource/healthy-drinks/how-sweet-is-it/index.html

Calories and teaspoons of sugar in 12 ounces of each beverage:



For more information, see The Nutrition Source, www.hsph.harvard.edu/nutritionsource/healthy-drinks/

Master Copy #18

Grades 6–12: Class Activity 2

Soft Drinks and Oral Health

http://www.msdh.state.ms.us/msdhsite/_static/43,2809,151.html

Soft drink consumption is one of several leading causes of tooth decay. Carbonation, sugar and acids in soft drinks weaken tooth enamel and encourage the growth of bacteria that contribute to tooth decay. Get the facts on how tooth decay starts and what you can do to prevent it.

How Tooth Decay Starts

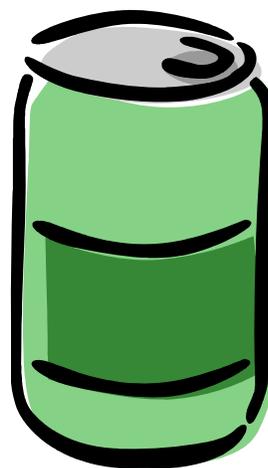
- Sugar in soda combines with bacteria in your mouth to form acid.
- This acid, plus the extra acid from soft drinks, attacks the teeth. Each acid attack lasts about 20 minutes, and acid attacks start over again with every sip.
- Ongoing acid attacks weaken tooth enamel.
- Cavities begin when tooth enamel is weakened or damaged.
- Remember, diet or “sugar-free” soda still has acid that can harm your teeth. Although fruit drinks aren’t carbonated like soda, they too have acid and sugar that can cause decay.

Reduce the Risk

- Drink carbonated beverages (soft drinks, soda pop) in moderation.
- Give infants and toddlers these beverages in a regular cup. Sucking on a bottle or sippy cup filled with these beverages promotes tooth decay.
- Use a straw to help keep sugar away from your teeth while drinking.
- Choose fluoridated water instead of fizzy drinks.
- Avoid drinking soft drinks and fruit juice before bedtime.
- Rinse your mouth with water or brush your teeth soon after using either of these.
- Get regular dental checkups and cleanings.

Acid and Sugar in Soft Drinks

	Acidity	Sugar Amount
Battery Acid	6	0
Pepsi	4.5	9.8 tsp.
Coca-Cola	4.5	9.3 tsp.
Minute Maid Orange Soda	4.2	11.2 tsp.
Dr. Pepper	4	9.5 tsp.
Gatorade	4	3.3 tsp.
Nestea	4	5.0 tsp.
Diet Pepsi	4	0
Mountain Dew	3.7	11.0 tsp.
Minute Maid Grape Soda	3.7	11.9 tsp.
Diet Coke	3.6	0
Diet Dr. Pepper	3.6	0
Sprite	3.6	9.0 tsp.
Barq’s	2.4	10.7 tsp.
Pure Water	0	0



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Grade 6 –12: The Mouth is Important to the Body

Class Activity 3: Overall Body Health and Oral Health

Time Needed: 50 minutes

Materials Needed:

Parent/Caregiver Information Letter for each student
Unit 9 Teacher Background Information

Objectives for Student Learning

- Determine approach to oral health and overall health
- Understand the mouth is the gateway to overall health
- Understand relationship between oral health and overall body conditions, like diabetes, heart disease and stroke, pregnancy, respiratory infections, and medication side effects
- Complete health improvement plan

Essential Questions

Pre-assessment

Engage your students by assessing their general knowledge on the following questions:

	Poor	Fair	Good
How does oral health impact overall health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What role does the mouth play in overall health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What health conditions are improved with good oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What can you do to maintain good oral health and overall body health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure/Instruction

- Review Unit 9 Teacher Background Information with students. Discuss the relationship between the mouth and the whole body.
- Discuss the relationship between good oral health and good overall body health.
- Discuss oral health and overall body conditions like diabetes, heart disease and stroke, pregnancy, respiratory infections, and medication side effects.
- Brainstorm ways to maintain good oral health and overall body health.
- Divide class into groups of four and ask each group to complete a plan to improve their health. Allow 15 minutes for group work.
- At the end of 15 minutes, ask each group to share with the class their improvement plan.

Parent/Caregiver Information Letter

- Make copies of the Parent/Caregiver Information Letter for Unit 9 (Appendix C) to send home with each student.

Closure/Assessment

Post-assessment

At the end of the class period, complete this post-assessment and compare the answers to the pre-assessment:

	Poor	Fair	Good
How does oral health impact overall health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What role does the mouth play in overall health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What health conditions are improved with good oral health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What can you do to maintain good oral health and overall body health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Essential Academic Learning Requirements

Unit 9, Sixth Grade – High School: The Mouth is Important to the Body

This unit meets the following Washington State Essential Academic Learning Requirements:

Writing

EALR 2: The student writes in a variety of forms for different audiences and purposes.

Reading

EALR 1: The student understands and uses different skills and strategies to read.

EALR 2: The student understands the meaning of what is read.

2.1: Demonstrate evidence of reading comprehension.

2.4: Think critically and analyze author's use of language, style, purpose, and perspective in literary and informational text.

EALR 3: The student reads different materials for a variety of purposes.

Communication

EALR 1: The student uses listening and observation strategies to gain understanding.

1.1: Uses listening and observation skills to focus attention and interpret information.

1.2: Understands, analyzes, synthesizes, or evaluates information from a variety of sources.

Science

EALR 4: Life Science: Evaluate how lifestyle choices and environments (e.g., tobacco, drug, and alcohol use, amount of exercise, quality of air, and kinds of food) affect parts of the human body and the organism as a whole.

Health and Fitness

EALR 1: The student acquires the knowledge and skills necessary to maintain an active life: Movement, physical fitness, and nutrition.

1.5: Understands relationship of nutrition and food nutrients to body composition and physical performance.

1.5.1 Analyzes the relationship of nutrition planning to physical performance and body composition.

1.5.2 Evaluates how nutritional requirements change.

1.5.3 Analyzes the effectiveness of various nutritional products.

1.5.4 Evaluates how healthy and unhealthy eating patterns impact the function of the body.

EALR 2: The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.

2.1: Understands dimensions and indicators of health.

2.3: Understands the concepts of prevention and control of disease.

2.4: Acquires skills to live safely and reduce health risks.

EALR 3: The student analyzes and evaluates the impact of real-life influences on health.

3.2: Evaluates health and fitness information.

EALR 4: The student effectively analyzes personal information to develop individualized health and fitness plans.

4.1: Analyzes personal health and fitness information.

4.2: Develops and monitors a health and fitness plan.

Math

EALR 1: The student understands and applies the concepts and procedures of mathematics.

EALR 2: The student uses mathematics to define and solve problems.

EALR 3: The student uses mathematical reasoning.

EALR 4: The student communicates knowledge and understanding in both everyday and mathematical language.

EALR 5: The student understands how mathematical ideas connect within mathematics to other subjects.

Essential Academic Learning Requirements

Tooth Tutor

Glossary

Glossary

addiction	A strong physical and psychological craving for a substance.
baby bottle tooth decay	Also known as severe Early Childhood Caries. A severe pattern of dental decay in infants and young children that first attacks the upper front teeth.
bacteria	A group of one-celled microorganisms that are mostly disease producing.
bicuspid (premolar)	One of the two permanent teeth located in front of the molars and behind each cuspid. These teeth have two cusps (points) and their function is to tear and grind food.
carbohydrate	A main source of energy for our body that is composed of starches and sugars. Bread, cereal, fruits, and vegetables are predominant sources of carbohydrates.
caries (dental caries)	The breakdown of tooth surface caused by the acids produced by bacteria and sugar.
cavity (cariou lesion)	An area of the tooth affected by dental decay (a hole).
crown	The part of the tooth covered with enamel and protruding above the gum line.
cuspid (canine)	A sharp, pointed tooth used for tearing food, located between the first bicuspid and the lateral incisor.
deciduous teeth	See primary teeth.
demineralization	Process of mineral loss from the enamel during the early stages of dental decay. The mineral loss results in chalky white or opaque patches on the tooth surface.
dentin	A tissue, hard and bone-like, that forms most of the tooth.
digestive enzymes	Enzymes that speed the process of breaking large food molecules into smaller units that are absorbed into the cells.
emphysema	A disease in which lung tissue is destroyed and air sacs are lost.
enamel	The visible outer layer of the tooth.
enzyme	A catalyst produced by an organism and used to speed up a specific kind of chemical reaction.
fluoride	A mineral that is effective in preventing and reversing the early signs of dental caries. Fluoride occurs naturally and contains the element fluorine.
fructose	Known as fruit sugar, fructose is a member of the simple sugars carbohydrate group found in fruits, honey, syrups, and certain vegetables.
gingiva (gums)	The tissue that surrounds the neck of the tooth and covers the alveolar bone.
gingivitis	Gum inflammation caused by the buildup of plaque along the gum line. If left untreated, gingivitis may lead to more serious, destructive forms of periodontal disease that lead to the loss of bone that supports the teeth.

glucose	A member of the simple sugar carbohydrate group that is found in fruits and honey. Glucose is the most common free sugar that circulates in the blood of higher animals.
gum disease	Also called periodontal disease, gum disease may appear as red, swollen gums that bleed. Gingivitis is a milder and reversible form of periodontal disease that only affects the gums.
signs of infection	Pain is a late sign of mouth infection.
incisor	One of the four front teeth on the upper and lower jaw.
lactose	The sugar contained in milk that contributes to tooth decay, although milk is more nutritious than candy, cookies, and cake.
microorganism	An organism too small to be seen with the unaided eye, such as bacteria, viruses, unicellular algae, and protozoans.
molar	A tooth located in the back of the mouth used for crushing and grinding food. There are usually three permanent molars and two primary molars on each side of the jaw.
nicotine	The addictive substance in tobacco.
oral cavity	The inside of the mouth, bounded by the palate, teeth, and tongue.
oral hygiene	Activities that promote good health of the mouth.
palate	The roof of the mouth – the partition between the oral and nasal cavities that is formed by the hard palate and the soft palate.
passive smoking	Breathing air contaminated with tobacco smoke, also called secondhand smoke.
permanent teeth	The second and final set of teeth to appear in the mouth, consisting of 32 teeth.
pits and fissures	Dimples (pits) and creases (fissures) found on six- and twelve-year molars and premolar teeth. Pits are also located on the back surfaces of some upper front teeth.
plaque	A sticky, thin film that is made up of a protein substance and microorganisms that adhere to the tooth.
primary teeth	The first set of teeth. This set of 20 teeth is also known as baby, deciduous, or milk teeth.
pulp chamber	The tooth's innermost part containing blood vessels, cells, and nerves.
remineralization	The reversal of demineralization of tooth enamel.
root	The part of the tooth that anchors it to the bone and is normally beneath the gum.
saliva	The watery liquid secreted into the mouth from the salivary glands.
salivary gland	An organ that secretes saliva.
sealants	Thin coatings made of plastic applied to the chewing surfaces of back teeth to prevent decay.

sidestream smoke	Smoke from the burning end of a cigarette, cigar, or pipe.
six-year molars	The first permanent molar teeth to come into the mouth.
starch	A complex carbohydrate made up of many glucose molecules linked together and found in foods like potatoes, wheat, rice, and corn.
sucrose	Also known as white or table sugar. Glucose and fructose are the two simple sugar units that make up sucrose. Sucrose occurs naturally in many green plants as a product of photosynthesis.
tobacco	The dried leaves of a plant of the nightshade family, processed primarily for smoking in cigarettes, cigars, and pipes.
tongue	Movable organ on the floor of the mouth.
tooth decay	See caries.
white spot lesions	A chalky or opaque patch on the tooth surface resulting from early loss of minerals from the tooth enamel. White spots can be precursors to cavities. They are avoidable if proper oral hygiene and diet are followed.
wisdom tooth	The third molar found in each jaw.
x-ray	A photograph that reveals details not normally visible.
xerostomia	Abnormal dryness of the mouth due to a lack of saliva.

Tooth Tutor Appendices

Appendix A

Master Copies

Number	Name
1	Why Do We Have Teeth? (attached)
2	When Do Baby Teeth Appear? www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Eruption_Chart_Baby_Teeth.pdf
3	Tooth Types www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Tooth_Types.pdf
4	25 Healthy Snacks for Kids www.eatright.org/Public/content.aspx?id=206
5	How to Brush Your Teeth www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/How_to_Brush_letter_English.pdf
6	How to Take Care of My Toothbrush www.cdc.gov/OralHealth/infectioncontrol/factsheets/toothbrushes.htm
7	Play it Safe with Your Teeth www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Play_It_Safe_With_Your_Teeth.pdf
8	Play Safe Every Day – coloring pages www.healthyschoolsms.org/health_education/documents/playsafe.pdf
9	First Aid for Dental Emergencies www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/First_Aid_for_Dental_Emergencies_tabloid.pdf
10	Visiting the Dentist www.ada.org/sections/publicResources/pdfs/shining_curriculum.pdf
11	How to Floss www.ada.org/sections/professionalResources/pdfs/activity_how_to_floss.pdf
12	Tooth Anatomy www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Tooth_Anatomy.pdf
13	Mouth Discovery www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Mouth_Discovery.pdf
14	Dental Sealants Seal Out Tooth Decay www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Seal%20Out%20Tooth%20Decay%20-%20English.pdf
15	How Do We Get Fluoride for Our Teeth? www.ncdhhs.gov/dph/oralhealth/library/includes/ed-materials/Fluoride_Coloring_Sheet_tabloid.pdf
16	Growth of a Cavity (attached)
17	MyPyramid Poster http://teamnutrition.usda.gov/resources/mpk_poster2.pdf
18	Soft Drinks and Oral Health http://www.msds.state.ms.us/msdhsite/_static/43,2809,151.html
19	How Sweet Is It? www.hsph.harvard.edu/nutritionsource/healthy-drinks/how-sweet-is-it/index.html
20	It's Math Time http://fha.maryland.gov/pdf/oralhealth/cdhm_activity_math_eng.pdf
21	The Effects of Tobacco on the Body (attached)

Number	Name
22	The Impact of Tobacco on the Body and the Mouth (attached)
23	What Is In a Cigarette? (attached)
24	Tobacco Advertising Strategies www.media-awareness.ca/english/resources/educational/handouts/tobacco_advertising/tricks_of_the_trade.cfm
25	Cigarette Advertisements (attached)
26	Oral Piercing Fact Sheet www.odh.ohio.gov/ASSETS/0EBEE96611C34DCF9C3AE7617CAB0424/factsht_oral%20piercing.pdf
27	MyPyramid Worksheet http://teammnutrition.usda.gov/resources/mpk_worksheet.pdf
28	Girl Body Mass Index www.cdc.gov/growthcharts/data/set1clinical/cj41l022.pdf
29	Boy Body Mass Index www.cdc.gov/growthcharts/data/set1clinical/cj41l023.pdf
30	Tooth Coloring Page www.coloringpagestube.com/index.php?main_page=large_coloring_page&pID=12307&cPath=748_776

Books

Activity	Name	Author
Pre-K, Activity 2	The Tooth Book	Laurie King and Fallon Parrott
	The Tooth Book	Dr. Seuss
Pre-K, Activity 3	How Many Teeth?	Paul Showers
	Arthur's Tooth	Marc Brown
Pre-K, Activity 4	The Mixed Up Tooth Fairy	Keith Faulkner
Pre-K, Activity 11	Home Safety (Adventures in the Roo World: Young Roo Series No. 4)	Pati Myers Gross
Pre-K, Activity 12	Safety on the Playground	Lucia Raatma
	Taking Turns	Janine Amos and Annabel Spenceley
Pre-K, Activity 13	I Can Be Safe: A First Look at Safety	Pat Thomas and Leslie Harker
Pre-K, Activity 14	A Visit to the Dentist	Eleanor Fremond and Andy Mastrocinque
	Just Going to the Dentist	Mercer Mayer
	The Berenstain Bears Visit the Dentist	Stan Berenstain
	Show Me Your Smile!	Christine Ricci
	A Visit to the Dentist (Dora the Explorer)	Anne Civardi
	Timmy Visits the Dentist	Lim Swee Teck

Books are mentioned in the activity where they first appear.

Appendix B

Useful Links for Teachers

- American Academy of Pediatric Dentistry
www.aapd.org
- American Dental Association – Classroom ideas and resources
www.ada.org/387.aspx
- Delta Dental of New Jersey (2010) Kids Club: Dental Trivia
www.deltadentalnj.com/kids_club/trivia/dental_trivia_01.shtml
- Healthy school snacks
www.cspinet.org/nutritionpolicy/healthy_school_snacks.pdf
- How to find dental care: Washington State Department of Health, Oral Health Program
<http://doh.wa.gov/cfh/oralhealth/findcare/>
- Kid's Stuff: Do you know your teeth?
www.adha.org/kidstuff/index.html
- National Center for Chronic Disease Prevention and Health Promotion – Healthy Youth Coordinated School Health Program
www.cdc.gov/HealthyYouth/CSHP
- National Institute of Dental and Craniofacial Research (NIDCR)
www.nidcr.nih.gov/OralHealth/
- National Museum of Dentistry
www.dentalmuseum.org/ysi/
- Oral health and learning
www.mchoralhealth.org/PDFs/Learningfactsheet.pdf
- Promoting Oral Health in Schools: A Resource Guide
www.mchoralhealth.org/PDFs/ResGuideSchoolOH.pdf
- United States Department of Agriculture – My Pyramid: www.mypyramid.gov/index.html
Print Materials: www.mypyramid.gov/tips_resources/printmaterials.html
Resource Library: <http://teammnutrition.usda.gov/resources/mypyramidclassroom.html>
- Visiting the dental hygienist
www.adha.org/kidstuff/games/visit/visiting.htm
- Washington State Department of Health
Sealants: <http://doh.wa.gov/cfh/oralhealth/sealants/default.htm>
Smile Survey: www.doh.wa.gov/cfh/oralhealth/docs/smilesurvey/fs2005ss.pdf

Appendix C

Parent/Caregiver Information Letters

For Units 1 to 10

Please send these letters home with your student after teaching each unit.
(English letters: pages 156-165; Spanish letters: pages 166–175)

Tooth Tutor

Parent/Caregiver Information Letter

Unit 1

Importance of a Healthy Mouth

Dear Parents and Caregivers,

This week your child learned about good oral health habits, the importance of a healthy mouth and why we have teeth.

Dental decay remains the most common chronic disease among children, far more frequent than asthma and hay fever. In the Washington State Smile Survey, almost half (40 percent) of Head Start/ECEAP pre-school children had tooth decay. Children experience unnecessary pain and suffering from tooth decay. The good news about tooth decay is that it is preventable with fluoride, sealants, and good oral hygiene.

Parts of the Mouth:

- Teeth help us eat, speak, sing, smile and have a balanced face
- Healthy gums and bone help hold teeth in place
- Cheeks, lips and palate are essential for chewing and speaking
- The tongue helps us speak and taste foods

Good oral health means brushing twice a day with fluoride toothpaste after breakfast and before bedtime. You may want to supervise your child to be sure he or she is brushing correctly. Please encourage your child to make brushing and flossing a daily habit.

Ask your child to share what they learned about good oral health habits, the importance of a healthy mouth and why we have teeth.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 2

Tooth Shapes and Functions

Dear Parents and Caregivers,

This week your child learned about tooth shapes and functions and the differences between primary (baby or deciduous) teeth and permanent (adult) teeth. The class discussed how to protect baby teeth, as some baby teeth remain in the mouth until age 12. It is important to keep baby teeth healthy as they make way for permanent teeth.

Baby and Permanent Teeth:

- Baby teeth help young children to chew and speak correctly
- Baby teeth hold space in the jaw for permanent teeth developing under the gums
- Baby teeth extracted (removed) too early can cause permanent teeth to be misaligned or crooked
- Children begin losing their baby teeth naturally between the ages of 6 and 12
- Children have a mix of baby and permanent teeth between the ages of 6 and 12
- The first baby teeth to loosen are the central incisors (front teeth) near age 6
- The last baby teeth to loosen are the back molars by age 12
- The front teeth, called incisors, are for biting food into smaller pieces
- The canine and premolars are sharp and pointed for tearing and cutting foods
- The molars, at the back of the mouth, are for grinding and mashing food.

Good oral health means brushing twice a day with fluoride toothpaste after breakfast and before bedtime. You may want to supervise your child to be sure he or she is brushing correctly. Please encourage your child to make brushing and flossing a daily habit. Ask your child what they learned about teeth today.

Thank you

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 3

The Tooth Decay Process

Dear Parents and Caregivers,

This week your child learned about the tooth decay process. Tooth decay is a complex disease involving three factors: teeth, bacteria, and sugar/starch.

Tooth Decay:

- Bacteria around teeth use food particles to make acid
- Frequent eating or snacking causes too many acid attacks
- Acid attacks break down the enamel structure of the tooth leading to decay
- Decay will continue to spread deep into the tooth structure and cause a cavity (hole) if the decay process goes unchecked.

Brushing and flossing both the baby and adult teeth is important to protect and maintain healthy teeth. Flossing helps remove food and bacteria from between the teeth and places the toothbrush cannot reach. It is important to take care of your child's teeth by encouraging brushing with fluoride toothpaste after breakfast and before bedtime.

Ask your child to share what they learned about baby teeth, permanent teeth, tooth shapes, and tooth functions.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 4

Preventing Tooth Decay – Fluoride, Sealants, Nutrition

Dear Parents and Caregivers,

This week your child learned about preventing tooth decay. Topics of class discussion included fluoride, sealants, and a healthy diet to prevent decay.

Fluoride

Fluoride is safe and effective in preventing and reversing the early signs of tooth decay. Fluoride makes the tooth stronger, so teeth are more resistant to daily acid attacks. To prevent tooth decay:

- Use fluoride toothpaste twice a day after breakfast and before going to bed
- Drink water with fluoride at the recommended levels
- Ask your child’s dentist or pediatrician about fluoride treatments, such as varnish or gel

Sealants

Sealants are a thin plastic coating applied to the biting surface of the back molar tooth to prevent decay. Sealants prevent decay by sealing the tooth and keeping bacteria away from the teeth for up to 10 years. The American Dental Association and the Centers for Disease Control and Prevention recommend sealants for **all** children.

Nutrition

Good nutrition for general health will contribute to good oral health. Children who eat balanced meals and snacks with a wide variety of fresh, canned, or frozen fruits and vegetables are more likely to have healthy teeth and healthy bodies. Eating and snacking too often contributes to tooth decay. Any carbohydrate (such as breads, cereal, crackers, and juice) will contribute to tooth decay. For healthy teeth:

- Avoid sticky foods; offer fruits nuts, cheese, or milk instead
- Encourage students to choose water or milk rather than fruit juice or sweetened beverages (e.g., fruit drinks, sports drinks, and soda).
- Offer your child water to “swish and rinse” food away after eating
- Brush after eating foods that stick to teeth
- Avoid using candy or sweets as a reward
- Eat sweets as dessert at a mealtime that is followed by tooth brushing

The food pyramid recommends limiting daily sugar intake. If your student consumes around 2000 calories a day, the average amount of sugar should be limited to 10 teaspoons. One can of soda pop contains about 11 grams of sugar. Soda also contains phosphoric acid, which can lead to the breakdown of tooth enamel. Snack foods easily contribute more sugar than recommended for the entire day. Sugar content is now included on all food labels. To determine teaspoons of sugar from grams of sugar provided on food labels, simply divide by 4.

Example: Chocolate Granola Dipps (1 bar)

$$15 \text{ grams of sugar} \div 4 = 3\frac{3}{4} \text{ teaspoons of sugar}$$

Take some time with your child to figure out how much sugar is in their favorite cereals and snacks. Use this time to talk with your child about what they learned today.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 5

Oral Hygiene – Tooth Brushing and Flossing

Dear Parents and Caregivers,

This week your child learned about brushing and flossing. Brushing twice a day with fluoride after breakfast and before bed is an easy way to fight tooth decay.

Effective brushing:

- Use a soft toothbrush (small enough to reach all areas of the mouth)
- Brush with fluoride toothpaste after breakfast and before going to bed at night.
- Children under age two should not use toothpaste unless their dentist or physician recommends it. Children over age two can use a small pea-sized (the size of a child's pinky nail) amount of toothpaste.
- Tooth brushing without fluoride toothpaste is not a good way to prevent cavities

Toothbrush Care:

- Rinse in toothbrush in cold water.
- Do not bite or suck the bristles of toothbrush.
- Store toothbrush in a dry location where it does not touch other toothbrushes.
- Replace toothbrush when bristles are worn out (every three or four months) or after a cold, sore throat, flu, or infection.

Flossing Facts:

- Floss prevents decay between the teeth.
- Floss removes particles that your toothbrush cannot reach.
- Floss removes bacteria that tooth brushing misses.
- Nightly flossing before bed helps prevent tooth decay.
- Children under age 7-8 need help with flossing from a parent or caregiver.
- For ease, purchase a flossing device at your local drugstore.
- Children may find 18 inches of floss tied in a circle easier to hold.
- Using floss or a flossing device requires skill and practice.

Ask your child to share what they learned about brushing and flossing.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 6

Tobacco, Alcohol, and Illicit Drugs

Dear Parents and Caregivers,

This week your child learned about the dangers of tobacco, alcohol, and illicit drugs.

Cigarettes:

In many cases, smokers suffer from severe gum disease, as the gums shrink; the roots of the teeth are exposed. However, once someone stops smoking, their overall health improves within just a few weeks. Your child learned it is never too late for anyone to stop smoking

- Lower the body's resistance to bacteria in the mouth
- Reduce blood and oxygen supplied to gums
- Is a risk factor for gum disease and oral cancer

Spit Tobacco:

Smokeless tobacco is incorrectly promoted as a safe alternative to cigarette smoking. Movies often show smoking as a masculine, attractive, and socially acceptable practice. Sports like baseball often show the spit tobacco habit as the perfect answer for active people who need to use their hands to pursue a career or hobby.

- Increases the risk of oral cancer and other health problems
- Contains high amounts of certain cancer-causing substances
- Contains the addictive stimulant "nicotine" like cigarettes

Alcohol:

Teens in the United States use more alcohol than tobacco or illicit drugs. Poor health in alcoholics is common. Signs include a smooth, shiny tongue, cracks in the corners of the mouth, and gingivitis.

- Enlarges saliva glands
- Reduces saliva flow
- Increases risk for tooth decay and gum disease
- Increases risk for oral cancer

Methamphetamine: (Meth)

Meth addicts often suffer terrible oral health problems caused by chemical ingredients and lack of oral hygiene. The nature of meth, combined with the lack of daily oral hygiene practices, can lead to a very advanced stage of tooth decay and severe breakdown in oral health. Meth mouth is a serious problem, which can lead to overall poor body health and a very unattractive smile.

Please take time to talk to your child about the physical dangers of drug use and ask them to share with you what they have learned.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 7

Injury Prevention

Dear Parents and Caregivers,

This week your child learned about injury prevention – how to safely protect the head, face, and teeth from injuries. Help your child stay safe. Remember that dental emergencies can and do happen, both at home and at school.

Accident Prevention:

- Play safely. Most dental injuries (broken or lost teeth) in children occur on the playground. Your child learned to look for safe play areas both inside and outside.
- Wear a seatbelt to protect the teeth.
- Wear protective gear, such as a mouth guard, a face protector, and a helmet for sports activities. These activities include biking, riding a scooter, skateboarding, snowboarding, in-line skating, and team sports.
- Wear a mouth guard if participating in contact sports. Mouth guards absorb energy during an impact, which helps to prevent dental trauma and traumatic brain injury.

Your child is encouraged to talk about their teeth with their parent or caregiver. Children with a toothache may act out because they are unable to identify the pain and tell others their teeth hurt. Children may not complain of pain and may not participate in home or classroom activities. Most tooth decay in children can develop into a toothache and dental infection quickly. Toothaches from untreated decay can be severe and will come and go until treated. The pain may go away for days or weeks only to reappear, usually at an inconvenient time. A toothache may develop following dental treatment, especially if the treatment was extensive. Ask your child to share any dental problems with you.

Tooth Emergency Tips for Parents:

- Learn how to practice first aid in case of a lost permanent tooth. Hold the tooth by the crown (top part) only, not the root. Rinse the tooth under cold water gently and do not scrub. Know the name and phone number of your child's dentist. The chances of saving a lost permanent tooth are more successful by placing the tooth in a secure container of cold milk or in a wet cloth. It is important to get to a dentist within two hours.
- Primary (baby) teeth that come out may be due to normal loss. If a baby tooth is lost prematurely, it is best to see a dental professional.
- For excessive bleeding after losing a baby tooth, place a clean folded gauze pad, cloth, or paper towel over the spot that is bleeding. Have your child bite on the gauze with pressure for 15 minutes. Change the gauze and repeat if necessary. Avoid rinsing.

Please take time to talk to your child about what they learned this week.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 8

Teen Oral Health

Dear Parents and Caregivers,

This week your teen learned about oral health issues related directly to adolescents. As parents and caregivers, you are aware that appearance and self-image are important to teens. Adolescents also have specific oral health issues not shared by younger age groups. This may include bad breath, tobacco, illicit drug use, oral piercings, mouth guards, eating disorders, orthodontic care, and tooth decay.

Teens need to continue good oral hygiene habits to prevent cavities and gum disease. They should continue brushing with fluoride toothpaste twice a day, flossing teeth once a day, drinking water containing fluoride at recommended levels, eating healthy, and avoiding drug use.

If your teen has braces, brushing after meals with fluoride toothpaste is essential to prevent the beginning of tooth decay.

Take time this week to talk to your teen about the:

- Dangers of smoking, drinking, and using illicit drugs
- Importance of maintaining a healthy, low sugar diet, and limiting frequent snacking
- Need to be aware of eating disorders
- Dangers of oral piercing:
 - * Piercings and tattoos carry the risk of infection from hepatitis, HIV, and tetanus.
 - * Piercings may cause permanently receded gums and chipped teeth.
 - * Tongue piercings can cause bleeding, choking, and allergic reactions that may cause swelling of the throat serious enough to block airway.
- Importance of wearing protective gear such as a mouth guard, face protector, and helmet for sports activities (biking, scooter riding, snowboarding, skateboarding, in-line skating, and team sports)

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 9

The Mouth is Important to the Body

Dear Parents and Caregivers,

This week your teen learned about the relationship between the mouth and total overall general body health. The mouth, lungs, intestines, and intestinal tract are potential entry sites through which a multitude of bacteria may gain access to the body. Oral diseases share common risk factors with chronic respiratory diseases, cancer, and cardiovascular disease. Risk factors may include an unhealthy diet, lack of exercise, poor oral hygiene, tobacco, and alcohol use.

Choices made in life influence overall general body health. To maintain good oral health and overall health:

- Drink water with fluoride at recommended levels
- Brush twice a day with fluoride toothpaste after breakfast and before bedtime to prevent gingivitis and periodontal disease.
- Use dental floss once a day before going to bed.
- Avoid tobacco, alcohol, and illicit drugs.
- Eat a healthy diet.
- Avoid frequent snacks containing sugars and starches.
- Control your blood sugar if you are diabetic
- Chew sugarless gum or lozenges to increase saliva production if you experience dry mouth.
- Visit your dental and medical providers when needed.

Ask your teen to share what they learned about the relationship between the mouth and total overall general body health.

Thank you.

Teacher

Tooth Tutor

Parent/Caregiver Information Letter

Unit 10

Visiting the Dental Office

Dear Parents and Caregivers,

This week your child learned about visiting a dental office. The class discussed equipment and tools used in the dental setting and what to expect at a dental appointment. Below are some common questions you may have about taking your child to the dentist.

How often should a child go to the dentist?

- Children may visit a dentist at least once a year, unless advised otherwise by your dentist or pediatrician.
- Tooth decay in children progresses very quickly, turning into a toothache and dental infection.

How should I prepare my child for a dental visit?

- Make sure your child has had a good night sleep and is well rested when visiting the dental office, as it might seem like an unusual place to some children.
- Keep the discussion about visiting the dentist cheerful and positive. It is important not to say words like “hurt” or “pain” around children when discussing a visit to the dentist.

How do I find dental care for my child?

- How to find dental care website lists dental providers by county in Washington State:
<http://doh.wa.gov/cfh/oralhealth/findcare/>
- Mobile dental vans are available in many communities
- Dental community care clinics offer a sliding scale fee
- Schools invite dental professionals to provide dental services on campus

Good oral health means brushing twice a day with fluoride toothpaste after breakfast and before bedtime. You may want to supervise your child to be sure he or she is brushing correctly. Please encourage your child to make brushing and flossing a daily habit.

Ask your child to share with you what they learned today about visiting the dentist.

Thank you.

Teacher

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 1

La importancia de tener una boca saludable

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre hábitos saludables de salud dental, la importancia de una boca saludable y porqué tenemos dientes.

La caries dentale continúa siendo la enfermedad crónica más común entre los niños y es mucho más frecuente que el asma y la rinitis alérgica. En la Encuesta de Salud Dental del Estado de Washington, casi la mitad (40 por ciento) de los niños en edad preescolar de los programas Head Start/ECEAP (Programa de Asistencia a la Educación Temprana) tenían caries dentales. Los niños experimentan dolor y sufrimiento innecesarios a causa de las caries dentales. La buena noticia sobre las caries dentales es que se pueden prevenir con el uso de flúor, selladores y una buena higiene dental.

Partes de la boca:

- Los dientes nos ayudan a comer, a hablar, a cantar, a sonreír y a tener una cara equilibrada
- Las encías y los huesos saludables ayudan a mantener a los dientes en su lugar
- Las mejillas, los labios y el paladar son fundamentales para masticar y hablar
- La lengua nos ayuda a hablar y a saborear las comidas

Una buena salud dental implica cepillarse los dientes dos veces por día con pasta dental con flúor después de desayunar y antes de acostarse. Es conveniente que supervise a su niño para asegurarse de que se está cepillando correctamente. Fomente en el niño el cepillado y la limpieza con hilo dental como hábitos diarios.

Pídale a su niño que comparta lo que aprendió sobre hábitos saludables de salud dental, la importancia de una boca sana y porqué tenemos dientes.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 2

Formas y funciones de los dientes

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre las formas y funciones de los dientes y las diferencias entre la dentición primaria (de leche o deciduales) y la dentición permanente (de adultos). En la clase se habló sobre cómo proteger los dientes de leche ya que algunos permanecen en la boca hasta los 12 años. Es importante mantener saludables a los dientes de leche a medida que van haciendo lugar para los dientes permanentes.

Dientes de leche y dientes permanentes:

- Los dientes de leche ayudan a que los niños mastiquen y hablen correctamente
- Los dientes de leche mantienen el espacio en la mandíbula para los dientes permanentes que se están desarrollando debajo de las encías
- La extracción prematura (quitar) de los dientes de leche puede provocar que los dientes permanentes salgan desalineados o torcidos
- Entre los 6 y los 12 años, los niños empiezan a perder los dientes de leche naturalmente
- Entre los 6 y los 12 años, los niños tienen una combinación de dientes de leche y permanentes
- Los primeros dientes de leche que se aflojan, a los 6 años aproximadamente, son los incisivos centrales (dientes anteriores)
- Los últimos dientes de leche que se aflojan son los molares posteriores a los 12 años
- Los dientes anteriores, denominados incisivos, se utilizan para morder la comida y reducirla a pedazos más pequeños
- Los caninos y premolares son afilados y puntiagudos y se utilizan para desgarrar y cortar la comida
- Los molares, ubicados en la parte posterior de la boca, se utilizan para triturar y moler la comida

Una buena salud dental implica cepillarse los dientes dos veces por día con pasta dental con flúor después de desayunar y antes de acostarse. Es conveniente que supervise a su niño para asegurarse de que se está cepillando correctamente. Fomente en el niño el cepillado y la limpieza con hilo dental como hábitos diarios. Pregúntele a su niño qué aprendió hoy sobre los dientes.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 3

El proceso de las caries dentales

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre el proceso de las caries dentales. La caries dental es una enfermedad compleja que involucra tres factores: dientes, bacteria y azúcar/almidón.

Caries dental:

- La bacteria que se deposita alrededor de los dientes utiliza partículas de comida para producir ácido
- La ingesta frecuente de comida o refrigerios causa demasiados ataques de ácido
- Los ataques de ácido estropean la estructura del esmalte de los dientes, lo que provoca la aparición de caries
- La caries continúa esparciéndose hacia la profundidad de la estructura del diente y produce una cavidad (agujero) si este proceso no se controla

El cepillado y la limpieza con hilo dental tanto en los dientes de leche como en los dientes adultos son importantes para proteger y mantener dientes saludables. La limpieza con hilo dental ayuda a quitar la comida y las bacterias que se depositan entre los dientes y en los lugares que no se pueden alcanzar con el cepillo de dientes.

Es importante cuidar los dientes de su niño fomentando el cepillado con pasta dental con flúor después de desayunar y antes de acostarse.

Pídale a su niño que comparta lo que aprendió hoy sobre los dientes de leche, dientes permanentes, formas y funciones de los dientes.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 4

Prevención de la caries dental flúor, selladores, nutrición

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre la prevención de las caries dentales. Se incluyó en los temas de discusión de clase el flúor, los selladores y una dieta saludable para prevenir las caries.

Flúor

El flúor es seguro y efectivo para prevenir y revertir los síntomas tempranos de la caries dentaria. El flúor fortalece los dientes, por lo tanto, los dientes se tornan más resistentes a los ataques de ácido diarios. Para prevenir las caries dentales:

- Utilice pasta dental con flúor dos veces por día después de desayunar y antes de acostarse
- Beba agua que contenga los niveles recomendados de flúor
- Pregúntele al dentista o pediatra de su niño sobre los tratamientos con flúor, tales como el barniz o el gel

Selladores

El sellador es una capa fina de plástico que se aplica sobre la superficie con la que se muerde de los molares posteriores para prevenir las caries. Los selladores previenen las caries ya que sellan el diente y mantienen las bacterias alejadas de los dientes por hasta 10 años. La Asociación Dental Americana y los Centros para el Control y Prevención de Enfermedades recomiendan el uso de selladores para todos los niños.

Nutrición

Una buena nutrición para la salud en general contribuirá con una buena salud dental. Los niños que ingieren comidas y refrigerios equilibrados, con una gran variedad de frutas y verduras frescas, enlatadas o congeladas tienen más probabilidades de tener cuerpos y dientes saludables. La ingesta muy frecuente de comida y refrigerios contribuye a la aparición de las caries dentales. Los carbohidratos (como panes, cereales, galletitas y jugos) contribuyen a la aparición de las caries dentales. Para dientes saludables:

- Evite las comidas pegajosas; en su lugar ofrezca frutas, frutos secos, queso o leche.
- Fomente en los estudiantes el consumo de agua o leche en lugar de jugo de frutas o bebidas azucaradas (por ejemplo: bebidas de frutas, bebidas para deportistas y sodas)
- Ofrezca agua a su niño para que “haga buchec y se enjuague” la boca después de comer
- Cepíllese después de ingerir comidas que se pegan a los dientes
- Evite el uso de caramelos o dulces como recompensa
- Ingiera dulces de postre a la hora de la comida y luego cepíllese los dientes

La pirámide alimenticia recomienda limitar la ingesta diaria de azúcar. Si el estudiante consume alrededor de 2000 calorías por día, la cantidad promedio de azúcar se debe limitar a 10 cucharaditas. Una lata de soda contiene alrededor de 11 gramos de azúcar. Las gaseosas también contienen ácido fosfórico, que puede estropear el esmalte de los dientes. Los refrigerios aportan con facilidad más azúcar que la recomendada para todo el día. El contenido de azúcar se incluye ahora en las etiquetas de los alimentos. Para realizar el cálculo de cuántas cucharaditas de té de azúcar hay en la cantidad de gramos de azúcar que aparece en las etiquetas de los alimentos, simplemente divida por 4.

Ejemplo: Barrita de granola y chocolate (1 barrita)
15 gramos de azúcar ÷ 4 = 3¾ **cucharaditas**

Tómese el tiempo para calcular con el niño cuánta azúcar contienen sus cereales y refrigerios preferidos. Aproveche este momento para hablar con el niño sobre lo que aprendió hoy.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 5

Higiene dental: cepillado y limpieza con hilo dental

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre el cepillado de dientes y la limpieza con hilo dental. Cepillarse los dientes dos veces por día con flúor después de desayunar y antes de acostarse es una forma sencilla de combatir las caries dentales.

Cepillado eficaz:

- Utilice un cepillo con cerdas blandas (lo suficientemente pequeño para llegar a todas las zonas de la boca).
- Cepille con pasta dental con flúor después de desayunar y antes de acostarse por la noche.
- Después de los dos años de edad, se debe utilizar una cantidad mínima de pasta dental en el cepillo. En el caso de niños mayores (después de los tres años de edad), la cantidad de pasta dental será similar al tamaño de una lenteja (el tamaño de la uña del dedo meñique de un niño).
- El cepillado de dientes sin pasta dental con flúor no es una buena forma de prevenir las caries.

Cuidado del cepillo de dientes:

- Enjuague el cepillo de dientes con agua fría.
- No muerda o chupe las cerdas del cepillo de dientes.
- Guarde el cepillo de dientes en un lugar seco en donde no tenga contacto con otros cepillos de dientes.
- Reemplace el cepillo de dientes cuando las cerdas estén desgastadas (cada tres o cuatro meses) o después de un resfrío, dolor de garganta, gripe o infección.

Datos de la limpieza con hilo dental:

- La limpieza con hilo dental previene las caries que aparecen entre los dientes.
- La limpieza con hilo dental quita las partículas que el cepillo de dientes no puede alcanzar.
- La limpieza con hilo dental remueve las bacterias que no se pueden quitar con el cepillado.
- La limpieza con hilo dental antes de acostarse por las noches previene las caries dentales.
- Los niños menores de 7-8 años necesitan que los padres o cuidadores los ayuden con la limpieza con hilo dental.
- Para mayor facilidad, compre un dispositivo de hilo dental en su farmacia local.
- Puede que sea más fácil para los niños sujetar 18 pulgadas de hilo atadas en un círculo.
- Se necesita habilidad y práctica para utilizar hilo dental o un dispositivo de hilo dental.

Pídale a su niño que comparta lo que aprendió sobre el cepillado y la limpieza con hilo dental.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 6

Tabaco, alcohol y drogas ilegales

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre los peligros del tabaco, el alcohol y las drogas ilegales.

Cigarrillos:

En muchos casos, los fumadores padecen de enfermedades graves de las encías dado que las encías se encogen; las raíces de los dientes quedan expuestas. Sin embargo, una vez que se deja de fumar, la salud en general mejora en tan solo unas pocas semanas. Su niño aprendió que nunca es tarde para que una persona deje de fumar.

- Disminuye la resistencia del cuerpo a las bacterias en la boca
- Reduce el suministro de sangre y oxígeno para las encías
- Es un factor de riesgo para las enfermedades de las encías y el cáncer de boca

Tabaco para escupir:

Se promociona de manera errónea al tabaco que no produce humo como una alternativa segura a fumar cigarrillos. El fumar se presenta en las películas como una práctica masculina, atractiva y socialmente aceptable. En deportes como el béisbol, a menudo se muestra el hábito de escupir tabaco como la respuesta perfecta para las personas activas que necesitan utilizar sus manos para el logro de una carrera o un hobby.

- Aumenta el riesgo de cáncer de boca y otros problemas de salud
- Contiene cantidades altas de ciertas sustancias que producen cáncer
- Como en los cigarrillos, contiene el estimulante adictivo, la “nicotina”

Alcohol:

El consumo de alcohol de los adolescentes en los Estados Unidos es mayor que el consumo de tabaco o drogas ilegales. Es común la salud deficiente en los alcohólicos. Entre los síntomas se incluyen: lengua lisa y brillante, grietas en las comisuras de la boca y gingivitis.

- Agranda las glándulas salivales
- Reduce el flujo de saliva
- Aumenta el riesgo de caries y enfermedades de las encías
- Aumenta el riesgo de cáncer de boca

Metanfetamina: (Meth)

Los adictos a la metanfetamina a menudo padecen de problemas terribles de salud dental causados por los ingredientes químicos y por la falta de higiene dental. Los efectos de la metanfetamina, combinada con la falta de prácticas diarias de higiene dental, puede llevar a una etapa avanzada de caries dentales y al colapso de la salud dental. La boca meth es un problema grave que puede llevar a una salud deficiente en general y a una sonrisa poco atractiva.

Tómese el tiempo para hablar con su niño sobre los peligros físicos del uso de drogas y pídale que comparta con usted lo que aprendió.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 7

Prevención de lesiones

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre la prevención de lesiones: cómo proteger de una manera segura la cabeza, la cara y los dientes de las lesiones. Ayude a que su niño se mantenga seguro. Recuerde que las urgencias dentales pueden ocurrir y ocurren tanto en el hogar como en la escuela.

Prevención de accidentes:

- Juegue de manera segura. La mayoría de las lesiones dentales (rotura o pérdida de dientes) ocurre en el patio de juegos. Su niño aprendió a buscar zonas seguras de juego, tanto en el interior como en el exterior.
- Use el cinturón de seguridad para proteger los dientes.
- Utilice equipos de protección, tales como protectores bucales y faciales y cascos para actividades deportivas. Estas actividades incluyen andar en bicicleta, en monopatín, en patineta, snowboard, patinaje con patines de ruedas en línea y deportes en equipo.
- Utilice un protector bucal si participa en deportes de contacto. Los protectores bucales absorben energía durante el impacto, lo que ayuda a prevenir el traumatismo dental y lesiones cerebrales traumáticas.

Se fomenta a su niño que hable sobre sus dientes con sus padres o cuidadores. Los niños con dolor de dientes podrían exteriorizarlo con un mal comportamiento porque no pueden identificar el dolor y no pueden decir a los demás que sienten dolor en los dientes. Puede que los niños no se quejen del dolor y que no participen en las actividades del hogar y de la clase. La mayoría de las caries dentales en los niños pueden evolucionar rápidamente en un dolor de dientes e infección dental. El dolor de dientes consecuencia de una caries no tratada puede ser severo y aparecerá y desaparecerá hasta que sea tratado. Puede que el dolor desaparezca por días o por semanas, pero podría reaparecer en un momento inoportuno. El dolor de dientes puede aparecer luego de un tratamiento dental, sobre todo si el tratamiento fue considerable. Pídale a su niño que comparta con usted cualquier problema dental.

Consejos para padres en caso de urgencias dentales:

- Aprenda cómo practicar primeros auxilios en caso de pérdida de un diente permanente. Sostenga el diente solo a la altura de la corona (parte superior), no a la altura de la raíz. Enjuague el diente con abundante agua fría y no lo refriegue. Conozca el nombre y el número de teléfono del dentista de su niño. Hay más posibilidades de salvar con éxito un diente permanente si se lo coloca en un envase seguro con leche fría o en un paño húmedo. Es importante llegar al dentista dentro de las dos horas.
- Puede que la dentición primaria (de leche) se caiga a causa de una pérdida normal. Si se pierde un diente de leche prematuramente, se aconseja visitar a un profesional odontológico.
- Si es excesivo el sangrado luego de la pérdida de un diente de leche, coloque una almohadilla doblada de gasa limpia, paño o toalla de papel sobre el punto de sangrado. Haga que el niño muerda y presione sobre la gasa durante 15 minutos. Cambie la gasa y repita si es necesario. Evite enjuagar.

Tómese el tiempo para hablar con su niño acerca de lo que aprendió esta semana.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 8

Salud dental de adolescentes

Estimados Padres y Cuidadores,

Esta semana, su hijo adolescente aprendió sobre asuntos de salud dental relacionados directamente con los adolescentes. Como padres y cuidadores, están conscientes de que es importante para los adolescentes la apariencia y la imagen de sí mismos. Los adolescentes también tienen asuntos específicos de salud dental que no comparten con grupos de edades menores. Estos podrían incluir mal aliento, tabaco, uso de drogas ilegales, aretes en la boca, protectores bucales, desórdenes alimenticios, cuidado de ortodoncia y caries.

Los adolescentes deben continuar con los hábitos saludables de higiene dental para prevenir las caries y las enfermedades de las encías. Deben continuar con el cepillado con pasta dental con flúor dos veces por día, con la limpieza con hilo dental una vez por día, beber agua que contenga los niveles recomendados de flúor, comer de manera saludable y evitar el consumo de drogas.

Si el adolescente usa frenos, es fundamental que se cepille los dientes con pasta dental con flúor después de las comidas para prevenir las caries.

Hágase el tiempo esta semana para hablar con su hijo adolescente sobre:

- Los peligros del consumo de tabaco, alcohol y drogas ilegales
- La importancia de mantener una dieta saludable baja en contenido de azúcar y limitar la ingesta frecuente de refrigerios
- La necesidad de ser conscientes de los desórdenes alimenticios
- Peligros de piercings o perforaciones en la boca:
 - * Los piercings y tatuajes traen aparejado el riesgo de contraer infecciones de hepatitis, HIV y tétano
 - * Los piercings podrían provocar la retracción permanente de encías y que se astillen los dientes
 - * Los piercings en la lengua podrían provocar sangrado, ahogos y reacciones alérgicas, que podrían provocar una inflamación de la garganta lo suficientemente grave como para obstruir el pasaje de aire
- La importancia del uso de equipos de protección, tales como protectores bucales y faciales y cascos para actividades deportivas (andar en bicicleta, en monopatín, snowboard, en patineta, patinaje con patines de ruedas en línea y deportes en equipo).

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 9

La boca es importante para el cuerpo

Estimados Padres y Cuidadores,

Esta semana, su hijo adolescente aprendió sobre la relación entre la boca y la salud general del cuerpo. La boca, los pulmones, los intestinos y el tracto intestinal son posibles lugares de entrada a través de los cuales pueden ingresar al cuerpo una gran cantidad de bacterias. Las enfermedades bucales comparten factores de riesgo con enfermedades respiratorias crónicas, cáncer y enfermedades cardiovasculares. Los factores de riesgo pueden incluir una dieta no saludable, falta de ejercicio, higiene dental deficiente, consumo de tabaco y alcohol.

Las elecciones que se realizan en la vida tienen influencia sobre la salud general del cuerpo. Para mantener una buena salud dental y salud en general:

- Beba agua que contenga niveles recomendados de flúor
- Cepille los dientes dos veces por día con pasta dental con flúor después de desayunar y antes de acostarse para prevenir la gingivitis y las enfermedades periodontales
- Utilice el hilo dental una vez por día antes de acostarse
- Evite el consumo de tabaco, alcohol y drogas ilegales
- Ingiera una dieta saludable
- Evite el consumo frecuente de refrigerios que contengan azúcar y almidón
- Controle sus niveles de azúcar en la sangre si es diabético
- Mastique pastillas o chicle sin azúcar para aumentar la producción de saliva si tiene la boca reseca
- Visite su proveedor dental o médico cuando sea necesario

Pídale a su hijo adolescente que comparta lo que aprendió sobre la relación entre la boca y la salud general del cuerpo.

Gracias.

Maestro

Tooth Tutor

Instructor dental

Carta informativa para padres/cuidadores

Unidad 10

Visita al consultorio dental

Estimados Padres y Cuidadores,

Esta semana, su niño aprendió sobre la visita al consultorio dental. En la clase hablamos sobre el equipo y las herramientas que se utilizan en el consultorio del dentista y qué esperar de una cita con el dentista. A continuación hay algunas preguntas comunes que podría tener al llevar a su niño al dentista.

¿Con qué frecuencia se debe llevar al niño al dentista?

- Los niños deben tener una visita al dentista por lo menos una vez por año, a menos que el dentista o pediatra aconsejen lo contrario.
- Las caries dentales en los niños progresan con rapidez y se convierten en dolor de dientes e infección dental.

¿Cómo debo preparar a mi niño para la visita con el dentista?

- Asegúrese de que el niño haya dormido bien durante la noche y que haya descansado al visitar el consultorio del dentista ya que para algunos niños podría resultar un lugar inusual.
- Mantenga alegre y positiva la charla sobre la visita al dentista. Es importante que no mencione las palabras “molestia” o “dolor” al frente de los niños cuando hable sobre la visita al dentista.

¿Cómo encuentro un dentista para mi hijo?

- El sitio web Cómo encontrar un dentista (sitio web en inglés) en <http://doh.wa.gov/cfh/oralhealth/findcare/> proporciona una lista de proveedores de salud odontológica por condado en el Estado de Washington
- Están a disposición furgones móviles para la atención de la salud dental en muchas comunidades
- Las clínicas comunitarias de atención dental ofrecen una escala móvil de honorarios
- Las escuelas invitan a profesionales de la salud dental para que provean servicios en el campus

Una buena salud dental implica cepillarse los dientes dos veces por día con pasta dental con flúor después de desayunar y antes de acostarse. Es conveniente que supervise a su niño para asegurarse de que se está cepillando correctamente. Fomente en el niño el cepillado y la limpieza con hilo dental como hábitos diarios.

Pídale a su niño que comparta lo que aprendió hoy sobre la visita al dentista.

Gracias.

Maestro

Dental Injury Prevention Guidelines

- **Be aware that injuries to the head, face, and mouth are common among children.**
- **Learn how to prevent oral injuries and how to handle oral emergencies.** Because of the danger of damaging the underlying permanent teeth, never attempt to reinsert an avulsed (lost) primary tooth. It is impossible to relocate the tooth accurately, and there is danger of pushing it too far into the soft alveolar bone.
- **Keep pet food and dishes out of reach.** Do not permit the child to approach the pet while it is eating.
- **Make sure that playgrounds are carefully maintained and that equipment is in good condition.** All playground equipment should be surrounded by a soft surface (e.g., fine, loose sand; wood chips; wood mulch) or by rubber mats manufactured for this use.
- **Supervise the child on playground equipment.** Make sure children play only on developmentally appropriate equipment.
- **Ensure that the child wears a bicycle helmet,** even on a tricycle.
- **Provide the child’s caregivers with the dentist’s emergency phone contacts,** and ensure that the caregivers know how to handle all emergencies.
- **Learn how to prevent oral injuries** and handle oral emergencies, especially the loss or fracture of a tooth. If a permanent tooth is knocked out, the parent or other adult should:
 1. Find the avulsed (lost) tooth,
 2. Hold it by the crown (top part) only, not the root,
 3. Rinse it under cold water gently if the root is dirty, but do not scrub,
 4. Reinsert it into the socket quickly, making sure that the front of the tooth is facing you, and
 5. Take the child to the dentist immediately.If it is not possible to replace the tooth, place the tooth in a container of cold milk or in a cold wet cloth and take the child and the tooth to a dentist immediately.
- **Because of the danger of damaging the underlying permanent teeth,** never attempt to reinsert an avulsed (lost) primary tooth. It is impossible to relocate the tooth accurately, and there is danger of pushing it too far into the soft alveolar bone.
- **If a tooth is fractured or chipped,** the parent or other adult should (1) rinse the child’s mouth with water, (2) apply cold compresses to the cheek to reduce swelling, and (3) take the child to the dentist immediately.
- **Use an appropriate car safety seat in the back seat of the vehicle at all times.** Children should ride in a forward-facing car safety seat until they reach the weight or height limit of the seat, after which they should ride in a belt-positioning booster seat with a lap and shoulder belt. Children should ride in a booster seat until the vehicle’s safety belt fits properly without a booster seat—when the shoulder belt lies across the chest, not the neck or the throat, the lap belt is low and snug across the thighs, not the stomach, and the child is tall enough to reach the vehicle seat back with the legs bent at the knees and feet hanging down.
- **Be aware that the risk of injury is higher during periods of rapid growth.**
- **Ensure that the child wears protective gear** when participating in physical activities or sports that could potentially result in injuries to the mouth, such as biking, riding a scooter, skateboarding, in-line skating, or playing baseball, soccer, or lacrosse.
- **Teach the child about injury prevention,** including the need to wear protective gear such as a mouth guard, a face protector, and a helmet.
- **Provide the child’s caregivers with the dentist’s emergency phone contacts,** and ensure that the caregivers know how to handle oral emergencies.

Source: “Bright Futures Oral Health Pocket Guide” by the National Maternal and Child Oral Health Resource Center
www.brightfuturesforfamilies.org/pocket_guide.shtml

Tooth Tutor

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DOH 160-083 September 2011