

Teeth to Treasure!

A lively classroom lesson for 4th through 6th grade students showing how taking good care of our teeth is something each of us can do.

Teeth to Treasure! reinforces good oral hygiene habits and focuses on special activities and conditions that require extra “tooth attention.”

This program from the American Dental Association (ADA):

- Helps instill in students a sense of competence and responsibility for keeping their teeth clean and healthy.
- Provides information on good oral health and tooth protection appropriate to their age and lifestyle.
- Reinforces dentists’ instructions on properly caring for teeth.

Teeth to Treasure! Gives you tools that can help you teach students the fundamentals of good oral health care:

- A flexible, modular lesson plan
- Support materials
- Hands-on classroom demonstrations
- Student activity sheets
- Suggestions for further dental health activities

Teeth to Treasure! is a valuable teaching tool for teachers, dentists, hygienists, school nurses, physicians and other health care professionals.

Teeth to Treasure!

A classroom lesson in good oral health care and tooth protection,
with special activities for 4th through 6th grade students.

MESSAGE TO THE TEACHER OR CLASSROOM PRESENTER

Teeth to Treasure! is a flexible oral health education program which can be used as a stand-alone lesson or to supplement an existing health curriculum. It is also a valuable teaching tool for dentists, hygienists, school nurses, physicians and other health care professionals.

Teeth to Treasure! is divided into two modules:

Module 1: "Protect Your Prized Possession!" approximate time: 20 minutes

Module 2: "Extra Protection for Terrific Teeth" approximate time: 10 minutes

The lesson objectives, key messages, and discussion topics can be presented in as little as half an hour, or can be supplemented with extra activities and discussions to serve as a full unit on dental care. This allows you to choose the method that will work best with the students. The lesson plan is loosely scripted with discussion questions, explanations and activities that you can easily adapt to your own unique style of teaching.

HOW **TEETH TO TREASURE!** WILL HELP YOUR STUDENTS

This program, developed by the American Dental Association (ADA), will:

- Provide information on good oral health and tooth protection appropriate to students' age and lifestyle.
- Instill in students a sense of competence and responsibility for keeping their teeth clean and healthy.
- Reinforce their dentists' instructions on properly caring for their teeth.

TEETH TO TREASURE! LESSON OBJECTIVES

The three lesson objectives are easy to remember and reinforce:

1. Taking good care of our teeth is something that each of us can do.
2. Adult (permanent) teeth are meant to last the rest of your life.
3. Special activities and conditions require extra "tooth attention."

BEFORE YOU START...

1. Read over the lesson plan and choose any of the supplemental activities you wish to incorporate.
2. Photocopy the *Teeth to Treasure! Word Search* and/or *Teeth to Treasure! Word Search Challenge* activity sheets for the students.
3. Collect the following materials for demonstrations: calculator; 4 Tums® antacid tablets; vinegar; 4 small paper cups; water; plastic wrap; transparent tape; dental floss.
4. Have the support materials for this unit handy: *How to Brush*; *How to Floss*; *Permanent Tooth Development*; *Old and New Toothbrushes*; *Mouthguard*; *Sealant Application*.

Module 1: “Protect Your Prized Possession!”

20 - 40 minutes

Key Message

Healthy teeth and mouth are important parts of a healthy body. Taking proper care of teeth now helps them last a lifetime.

Student goals

Upon completing this module students should be aware of the three basic steps to good oral health:

- Brush with fluoride toothpaste twice each day, and floss once each day.
- Eat nutritious foods and limit snacks.
- Visit your dentist regularly.

Module Topics (with discussion points and questions)

1. *Value*. Discuss what makes something valuable. [Write down all answers that apply to teeth: can't be replaced, good quality, lasts a long time, looks nice.] What about your teeth? Are they valuable? [Get opinions.] What do your teeth help you do?

Our teeth help us talk, eat and give us beautiful smiles!

2. *Primary and permanent teeth*. How many sets of teeth do people get in a lifetime? [Two.] What were your first teeth called? [Baby or primary teeth.] When you were little you got 20 baby teeth. Why did they fall out? [As children grow they need bigger, stronger teeth.] That's right, as you get older you need bigger, stronger teeth. By the time people are about 18 they have all 32 adult, or permanent teeth. (Show *Permanent Tooth Development*.) How long do permanent teeth last? [Your whole lifetime — more than 60 years with proper care.] If you lose a permanent tooth, will another one grow in? [No.]

We lose our 20 baby teeth and grow adult teeth because we need bigger, stronger teeth to last the rest of our lives. People get 32 permanent teeth, which can last a lifetime with proper care.

ACTIVITY #1: *Challenge Question: Are teeth a good quality product? (Give the calculator to a volunteer.) Here's the question: If you have your adult teeth for 60 years, and you eat three meals a day, how many times in your life will you use your teeth to chew food? [60 years x 365 days a year x 3 times a day = 65,700.] 65,700 chewing workouts — and that's if you don't eat snacks between meals! Now, just for fun, let's say that it takes ten minutes to eat a meal, and that you chew your food fifty times a minute. Can you figure out how many times your teeth would chew during those 65,700 workouts? [10 minutes x 50 chews/minute x 65,700 meals = 32,850,000 chews.] 32,850,000 chews! That's almost 33 million times for each tooth! Do you think your teeth are a good quality product? You bet!*

Permanent teeth can last more than 60 years!

3. *What happens if we don't take care of our teeth?* So taking care of your teeth sounds like a smart idea. What happens to your teeth if you don't take care of them? [Wait until someone mentions "cavities."]
4. *What a cavity is.* Let's talk about cavities and what causes them. What is a cavity? [A little hole in your tooth.] Right. A cavity is another name for tooth decay. What happens when something decays? [Gets rotten, falls apart, loses strength.] It's no different with your teeth. When your teeth decay, they lose their strength. The decay can also spread throughout your tooth.

A cavity is a small hole in a tooth, also known as tooth decay.

5. *What plaque is.* Does anyone know what causes cavities? [You may get a variety of answers, but they may not include plaque.] Those are all interesting answers, but there is one thing that plays a big part in causing decay, or cavities, in your teeth. It is called "plaque." [Write "plaque" on chalkboard.] Sound familiar? If you don't brush your teeth before you go to bed at night, how does your mouth feel when you wake up in the morning? [Tastes bad, smells bad, teeth feel sticky.] That is because plaque has been forming in your mouth all night. Plaque is a sticky, clear film that is forming on your teeth all the time.

Plaque is a sticky, clear film that is constantly forming on your teeth.

6. *How plaque contributes to decay.* Plaque is bad for your teeth because it contains germs. When you eat or drink sugary or starchy foods, the sugars and plaque mix together to make an acid. The acids in your mouth attack your tooth enamel — the hard outer layer of each tooth — and can cause decay. Each acid attack can last 20 minutes, making cavities bigger and bigger. Let's do a demonstration to help us understand how acid works on teeth.

ACTIVITY #2: Acid Attack. Place a Tums® tablet in each of two paper cups. Cover one tablet with vinegar; cover the other with water. Wait five minutes and empty the liquid out of the cups. What has happened to the tablets? The one in the vinegar has dissolved much faster than the one in plain water because vinegar is an acid. Both the Tums® tablet and a tooth contain calcium, and calcium dissolves more readily in acid than in water. [You may need to divide the class into 2 groups so that all the children can see. If possible, recruit another adult to assist with the demonstrations.]

**The sugars and germs in plaque mix together to make acid.
The acids in your mouth attack your teeth and can make cavities.
Repeated acid attacks make cavities grow bigger.**

7. *Repairing cavities.* What happens when someone gets a cavity in their tooth? Does it heal itself? [No. You have to go to the dentist to get it fixed.] That's right. Only your dentist can fix a cavity, by removing the decay and putting a special filling material in the hole.

**Cavities cannot go away by themselves.
They must be repaired by a dentist.**

8. *Keeping teeth and gums healthy.* So what can we do to get rid of the acid? How can you fight plaque and acid and keep those valuable permanent teeth healthy ? [List answers which may include brushing, flossing, visiting the dentist, good food and beverage choices.] Let's talk about some of these.
9. *Proper brushing.* Let's list all the good things that happen when we brush our teeth. [Brushing cleans food and plaque off your teeth, fights acid, makes your breath smell good, makes your mouth taste good.] Good answers. How often should you brush your teeth? [Twice a day.] There is a very important ingredient in most toothpastes that helps your teeth. Does anyone know what it is? [Fluoride.] Who knows what fluoride does? [Fluoride prevents cavities by strengthening and protecting the tooth enamel from acid.]

**Brush twice a day with a fluoride toothpaste.
Fluoride toothpaste helps prevent cavities by strengthening
and protecting tooth enamel.**

Move the brush back and forth gently in short strokes. Brush the top, front, and back sides of each tooth. You should also brush your tongue — *very gently!* Really! Your tongue has lots of germs on it that can cause your breath to smell bad.

ACTIVITY #3: Here is a picture of one good way to brush your teeth. It says...
(Show *How to Brush* and read instructions. Ask for questions and comments.)

**Move the brush back and forth gently in short strokes.
Brush the top, front and back sides of each tooth.
Brush your tongue gently, too.**

10. *Toothbrushes.* What kind of toothbrush is best for your teeth? Should it be large or small? [Get several answers.] You're right! You should use a toothbrush is easy to hold and helps you reach all your teeth.

**Use a toothbrush that is easy to hold and
helps you reach all your teeth.**

ACTIVITY #4: (Show *Old and New Toothbrushes* and discuss when to get a new toothbrush.) Here are two toothbrushes. How can you tell if you need a new toothbrush? [If the bristles are bent or broken.] Yes, you should get a new toothbrush when the bristles are bent and worn out. A worn out toothbrush can't clean the plaque off your teeth very well.

11. *Flossing.* Who remembers what dental floss is? [A special kind of string for cleaning between your teeth.] How many of you floss? How many of you floss once a day? Cleaning between your teeth with floss is just as important as brushing. Do you know why? [Flossing cleans between the teeth, where your toothbrush can't reach.] Flossing helps keep your teeth AND gums healthy! Flossing is not as easy to do as brushing, so you might have to ask your dentist, parents or another adult to show you how to do it properly. You should floss your teeth very gently, once a day.

Floss your teeth gently, once a day.

ACTIVITY #5: Show floss and explain the technique used in *How to Floss*.

12. *Good nutrition.* How does what we eat or drink affect our teeth? [Get a few comments.] What we eat can affect how much acid is made by the plaque in our mouths. Who remembers the food groups? [Make list on board.] Eating a mix of foods from these groups for breakfast, lunch and dinner is the best way to keep your teeth and whole body in good shape. (Visit www.mypyramid.gov for more information.) Let's see how good you are at making up some healthy meals.

ACTIVITY #6 (if time allows): Divide the class into teams of four students. See which group can make a menu of three balanced meals first. Discuss the choices, and how nutritious foods benefit your teeth as well as your total health.

Eating a nutritious mix of foods is the best way to keep your teeth and body healthy.

Good job! But what about snacks, sweets and soda pop? [Get opinions.] Eating sweets all day or drinking lots of soda pop is not good for our bodies, and it can cause cavities, too. Who remembers what happens in our mouths after we eat? Yes, plaque and sugar mix to form acid. Then the acid attacks our teeth. The more often we eat snacks, the more acid attacks we have. But that doesn't mean that all snacks are bad for you. Sometimes growing children and teens need to eat between meals. If you are hungry and need a snack, choose nutritious foods like fruit, low-fat cheese, low-fat yogurt or raw vegetables. If you are thirsty, have a glass of water or low-fat milk. Save the sweets to eat and drink with your meals. A full meal produces lots of saliva in your mouth that helps wash away the acids from your teeth.

If you have sweets, eat or drink them with your meals. If you need a snack, choose nutritious foods.

What about chewing gum? [Get opinions.] Chewing gum for about 20 minutes immediately after a meal or snack is okay as long as the gum is sugarless. In fact, sugar-free gum makes your mouth produce more saliva that can help rinse the acid off your teeth. When you are finished chewing, be sure to throw it away in a trash can.

Chewing sugarless gum increases saliva and helps wash out food and acid.

13. *Dental visits.* So far we have talked about three important ways you can care for your teeth — brushing, flossing and eating nutritious foods. There is one more very important thing we should all do to keep our teeth and gums healthy. Who can tell me what it is? Yes! Visit your dentist regularly. What does your dentist do? [Examines your teeth and mouth to see if they are healthy. Tells you how to take good care of your teeth. Fixes cavities and repairs teeth.] What else happens when you go to the dentist? [Get your teeth cleaned, have X-rays to see the insides of teeth to check for cavities and other problems, may get fluoride treatments.] Your dentist will tell you when your next visit should be.

Visit your dentist regularly.

Let's review what we know:

Summary: Kids in 4th, 5th and 6th grades can do a lot to help keep their teeth and gums in great shape! Brush twice a day with fluoride toothpaste, floss once a day, eat nutritious foods and limit snacks and visit your dentist regularly.

Module 2: “Extra Protection for Terrific Teeth”

approximate time: 10 minutes

Key Message

In addition to good oral hygiene and regular dental visits, sealants, mouthguards and good health habits can help teeth last a lifetime.

Student goals

Upon completing this module students should be aware of additional ways that teeth can be protected and kept healthy:

- What dental sealants are, and how they protect teeth from cavities.
- Why wearing mouthguards during active sports is important.
- Recognizing and eliminating behaviors that can harm their teeth.

Module Topics (with discussion points and questions)

1. *Dental sealants.* In addition to keeping your teeth clean, eating nutritious foods and visiting your dentist regularly, there are several other ways you can help your teeth last a lifetime. Does anyone know what dental sealants are? [Some children may have already had sealants applied to their teeth and may be able to explain the process to the class.] After your permanent molars have come in — the large adult teeth toward the back of your mouth — your dentist can coat them with a special dental plastic that seals out decay. Applying sealants is quick, easy and painless. Sealants can last for several years. How many of you have had sealants applied to your permanent teeth? Sealants are additional protection from decay that many of your parents didn't have. When your parents were children, getting cavities was much more common than it is today. This doesn't mean that you can stop caring for your teeth. You still need to brush and floss every day! Sealants are added protection.

ACTIVITY #7: Sealant Application. Here is a picture of a dental sealant being applied to a tooth. [If time permits, discuss students' experiences with sealants.]

Dental sealants are a special plastic coating that protect teeth from decay.

ACTIVITY #8: Let's do another experiment, this time to see if a plastic coating can protect our pretend tooth from the acid in vinegar. (Repeat Tums® acid test, this time to show the effectiveness of sealants. Wrap one Tums® in plastic wrap and seal with transparent tape, leaving the other unwrapped. Place each in the bottom of a paper cup. Cover both with vinegar. Wait five minutes and pour off the liquid. Unwrap the plastic from the Tums® tablet. The plastic has protected the "tooth" from the acid.) [You may need to divide your class into 2 groups so that all the children can see. If possible, recruit another adult to assist with the demonstrations.]

2. *Mouthguards.* There is something else you can do to protect your teeth, but this is used to help protect your teeth from getting broken or knocked out. Does anyone know what I'm thinking of? I'll give you a hint. You use it for active sports. [Mouthguard.] That's right! A mouthguard. How many of you have ever worn a mouthguard? A mouthguard is a piece of soft, molded plastic that covers your upper teeth. Your dentist can make one that fits your teeth exactly, or you can buy an unshaped mouthguard at the store that can be softened in boiling water and then shaped to fit over your teeth.

ACTIVITY #9: Mouthguard. Here is a picture of a mouthguard. Can someone explain to the class how it fits on the teeth?

Why is it so important to use a mouthguard? [Because if you lose your permanent teeth, new ones will not grow in to replace them.] Do you know anyone who has had teeth knocked out during sports? Will those teeth ever grow back? Wearing a mouthguard is smart even if you don't really want to wear it.

Let's list all the sports and activities that we can think of where your teeth and mouth might be injured. (Remember to include non-team sports such as skateboarding, gymnastics, and rollerblading.)

Mouthguards protect teeth from injury and should be used during all active sports.

Your dentist can make a custom mouthguard, or a self-fitted mouthguard can be purchased at a store.

3. *Behaviors that can hurt teeth.* Is there anything else you can do to protect those priceless treasures in your mouth? Sometimes NOT doing certain things is just as important as the positive things you do. Avoiding bad habits and unhealthy activities is important too. Can anyone name something you might do that would injure your teeth or the health of your mouth? [Write suggestions on chalkboard.]

4. *Chewing on hard objects.* What about chewing on hard objects? Chewing on ice cubes, pencils and pens, or even hard candy can chip or crack your teeth. Even though your teeth are made to last a lifetime, they are made for chewing food only!

**Don't chew on hard objects like pencils,
ice cubes or hard candy.**

5. *Tobacco.* There is another bad habit that is very dangerous, not only for your teeth, but for your mouth and entire body: using tobacco products. Tobacco is bad for your total health. All tobacco — not just cigarettes and cigars. Smokeless tobacco, also called chew, can cause mouth, tongue and lip cancer, and is sometimes more addictive than cigarettes. Tobacco products also stain your teeth and cause gum disease and tooth loss. AND – tobacco products cost a lot of money! Bottom line: There is nothing good to say about tobacco products. Never starting is your best defense against all the health problems related to tobacco.

Tobacco products can cause gum disease, tooth loss and cancer. BE SMART; DON'T START! AND SAVE MONEY, TOO!

We have learned a lot about our teeth today and how to take good care of them.

1. Taking good care of our teeth is something that each of us can do.
2. Your permanent teeth are meant to last a lifetime.
3. Special activities and conditions require extra “tooth attention.”

Summary: *Kids, parents and their dentist can work together to provide extra protection for precious teeth.*

ACTIVITY #10: Have students work individually or in pairs to complete the activity sheet *Teeth to Treasure! Word Search* or *Teeth to Treasure! Word Search Challenge* (based on students' ability levels or time allowed). [You may wish to have copies of *Permanent Tooth Development* and *Tooth Anatomy* available as a reference.]

SUPPLEMENTAL ACTIVITIES

1. Bring a store-bought mouthguard to class and talk about how it helps protect teeth. (You may be able to get one from your school's physical education department.) Also, remind students that their dentist can make a mouthguard that is custom-fitted to their mouth.
2. Have students work in pairs or small groups and make up recipes or snacks that are nutritious.
3. Have students develop a "Dental Health Quiz" which awards points for good oral health habits.
4. Invite a dentist to your class. (Dental Organizations often provide a list of speakers. Visit the Dental Organizations section of ADA.org, to search for a State or Local Dental Organization nearest you. <http://www.ada.org/goto/organizations/index.asp>)
5. For more online classroom resources, visit the Students & Teachers section of ADA.org. <http://www.ada.org/public/education/index.asp>

SUPPORT MATERIALS: CHARTS AND DIAGRAMS

- *How to Brush*
- *How to Floss*
- *Permanent Tooth Development*
- *Old and New Toothbrushes*
- *Mouthguard*
- *Sealant Application*

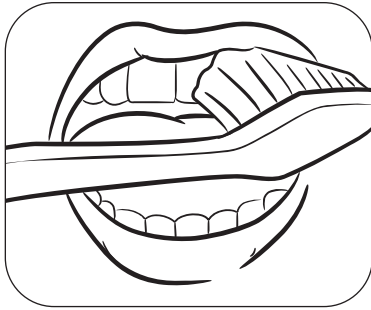
STUDENT ACTIVITY SHEETS

- *Teeth to Treasure! Word Search*
- *Teeth to Treasure! Word Search Challenge*

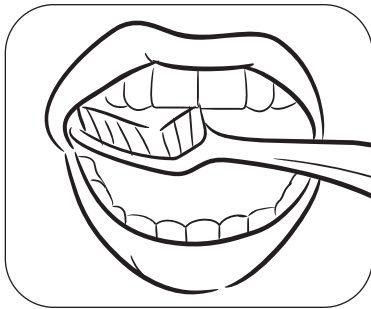
Additional educational materials are available for purchase by calling 1-800-947-4746 or by visiting www.adacatalog.org.

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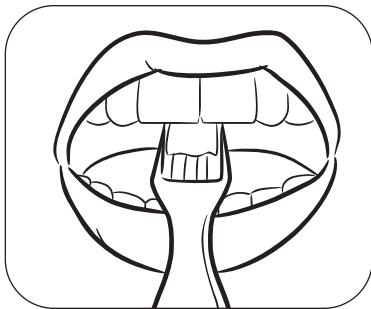
How to Brush



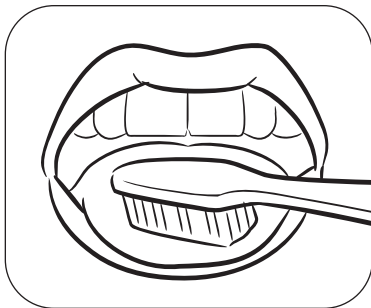
- Place the toothbrush at a 45-degree angle to the gums.



- Move the brush back and forth gently in short strokes.

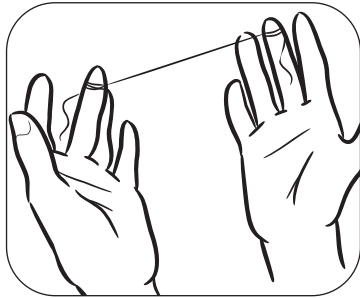


- Brush the outer surfaces, the inside surfaces and the chewing surfaces of all teeth.
- To clean the inside surface of the front teeth, tilt the brush vertically and make several up-and-down strokes.

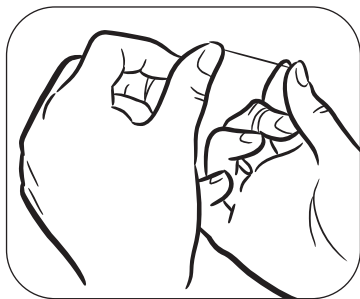


- Brush your tongue to remove bacteria and keep your breath fresh.

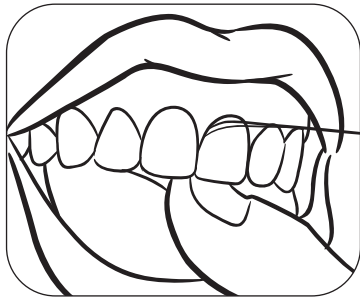
How to Floss



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



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



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

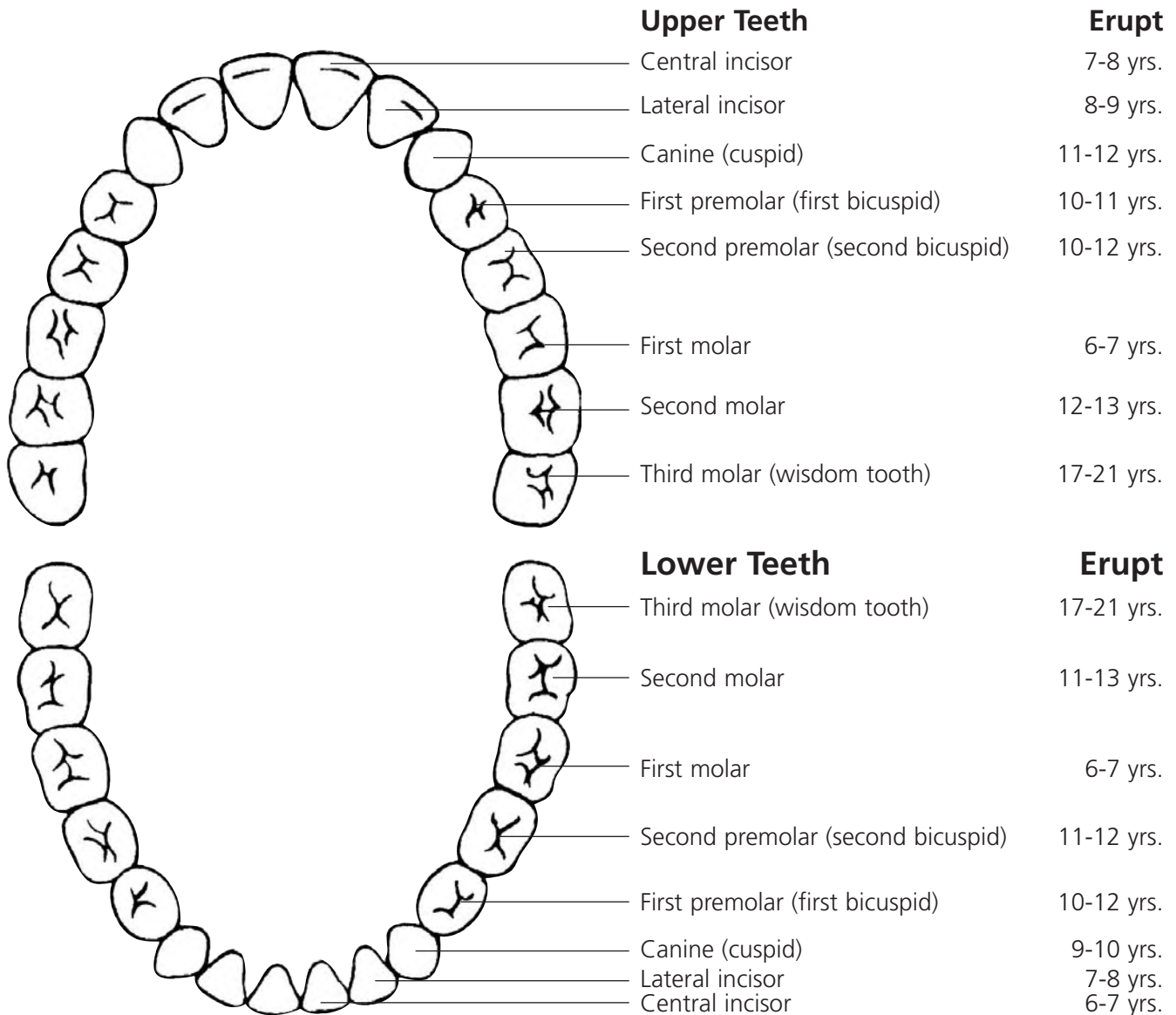


- Rub the floss gently up and down, keeping it pressed against the tooth. Don't jerk or snap the floss.

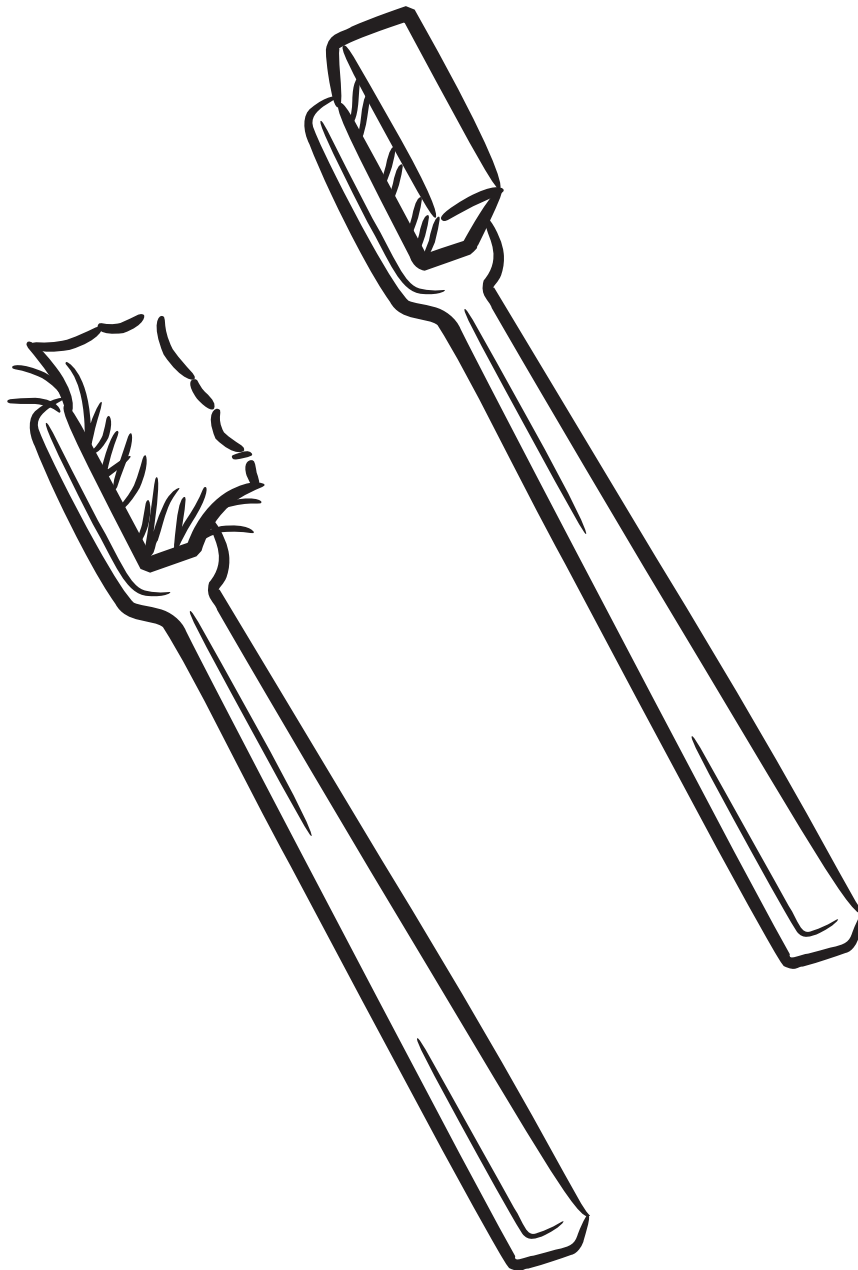


- Floss all your teeth. Don't forget to floss behind your back teeth.

Permanent Tooth Development



Old & New Toothbrushes



Mouthguard



Sealant Application



Teeth to Treasure!

Word Search

See how many words you can find in 20 minutes!

Words go across, up, down, and diagonal.

D C V M S S R J E G S D K F S
C S X O S M R Y T F V L R S T
Q B T O N G U E S G I U E O E
H R C X I P L G A M I L B U S
R S P T A J I I P T B A Q L L
F L U O R I D E H A C A S O M
T P F R G D G F T C L A E Y S
L H Q T B K E E O P Y X A F T
K E C H T H G N O K W S L L A
K W M J X E T H T O O T A O E
E D H A V I T O Z I D C N S M
B J X D N P U S O X S A T S E
S G M C M E S G N T W T I R E
D R A U G H T U O M L I Y L T
Y T I V A C U H F S Z X E O Y

CAVITY

FLOSS

GUMS

PLAQUE

TOOTH

DAILY

FLUORIDE

MEAT

SEALANT

TOOTHBRUSH

DENTIST

FRUIT

MILK

TOBACCO

TOOTHPASTE

ENAMEL

GRAINS

MOUTHGUARD

TONGUE

VEGETABLES

Teeth to Treasure!

Word Search Challenge

See how many words you can find in 20 minutes!

Words go across, up, down, and diagonal.

K E F Q J S P M O D K R D G C Q T M T E
 M Z K L D W E B O T P O H R K S E O C U
 X D G M O F C L S U C O B T I W O R E Q
 D A I L Y S W N B A T T D T J T S L D A
 A S G L E B S O V A J H N B H W P P I L
 H C E K I L C I F S T E G B E N I R R P
 E T S A P H T O O T D E R U J J L E O G
 P J U V L Y M F C S L U G A A N N V U J
 T D L E M A N E U Z S E O E Y R E E L U
 O E O O X B N G O H Y V F R V M D N F F
 B F V Q A E A T K X V L J T A P K T A U
 A S U N U R Y P X P K L A D F L E I K P
 C L N G W Q H T O O T E H N R Q T O V H
 C S N I H V L G K Z M W A J U B P N A X
 O O M I A N X G I X A N A F I X P Z R H
 T F I U A R V U C Z K H Z U T Z B A L D
 U I U Y G C G C P P B V X K P J Y S R Z
 P R I M A R Y Z A T E K Y L V P I R F J
 I I U J M I L K I K M O G N T L Z I L B
 B Q L X O I W D L A E H V L E U Z L I E

CAVITY
 DAILY
 DENTIST
 ENAMEL
 FLOSS
 FLUORIDE

FRUIT
 GRAINS
 GUMS
 JAW
 LIPS
 MEAT

MILK
 MOUTHGUARD
 ORAL
 PLAQUE
 PREVENTION
 PRIMARY

ROOT
 SEALANT
 SUGAR
 TOBACCO
 TONGUE
 TOOTH

TOOTHBRUSH
 TOOTHPASTE
 VEGETABLES
 XRAY



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