

The Amazing World of Oral Health



Teacher's Guide

Crest + Oral-B Dental Education Program

Brought to you by

Dear Educator:

Thank you for choosing the Crest + Oral-B Dental Education Program. We're excited to introduce you and your class to *The Amazing World of Oral Health*.



As you know, this is a wonderful time to introduce your class to the concept of oral health and help instill positive lifelong oral care habits. *The Amazing World of Oral Health* is designed to engage kids with animated segments to learn about their teeth and the importance of starting a healthy regimen at a young age.

The program comprises

- 1. A video to be shared with students
- 2. Activity Sheets that provide games around oral health
- 3. This companion Teacher's Guide, which includes background information for you

Our hope is that this program will help you successfully engage your students in learning about oral health. To ensure success, we also encourage you to supplement these materials with a classroom visit by a dentist or hygienist.

Remember that your school may require permission from the administration or school board before you implement the program. Be sure to follow your school's policy. In addition, we welcome your questions and comments. We are always working to enhance the program and meet your classroom needs.

Sincerely,
**The Crest + Oral-B
Dental Education Team**

Program Objectives

The goal of the Crest + Oral-B Dental Education Program is to help children learn about proper oral hygiene and develop good dental health habits that will last a lifetime.

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This Teacher’s Guide and accompanying materials will help reinforce good oral hygiene. For more great ideas for teaching your students about oral care, visit www.dentaeducation.crest.com. You can also find additional educational materials from Procter & Gamble at www.pgschoolprograms.com.

WARM-UP EXERCISE

Before jumping into the video and the lessons within each chapter, get your class thinking about oral health by asking a few of the following introductory questions.

Raise your hand if...

- You brush your teeth twice a day. Why do you think you do this?
- You've lost a tooth or have any loose teeth.
- You've been to a dentist's office before. What did you learn at the dentist's office?

Also ask...

- What do you like about brushing your teeth? What do you dislike?



Once the class is thinking about their teeth and daily oral care, you can then transition to *The Amazing World of Oral Health*. Explain to the class that they will be watching a fun video that teaches them about their teeth and daily oral health.

CHAPTER 1: Why Teeth & Gums Are Super Important

Chapter 1 of the video will instruct your students on facts about teeth and the role of their gums. The background information below will help round out any information relevant to the video that you may share with your students. Throughout the video, you'll notice a "Pause-and-Play" button pop-up on screen. This button indicates a point where you can stop, have a dialogue with kids, and/or begin an activity. At the bottom of each chapter in this Teacher's Guide, you'll find "Pause-and-Play" suggested activities based on the topic discussed.

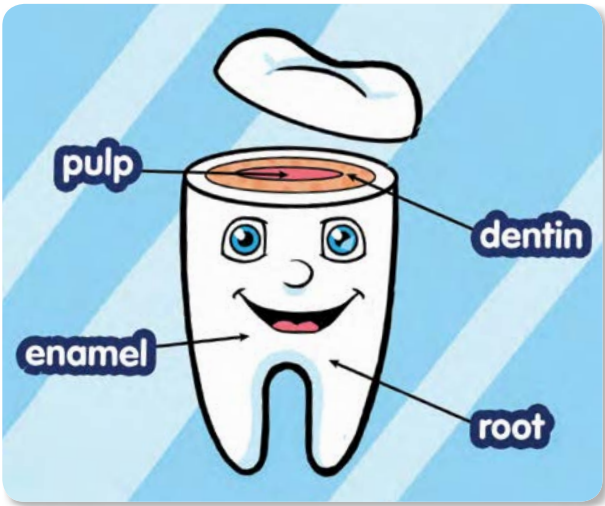
BACKGROUND: Facts About Teeth

Parts of a Tooth

Enamel: Exceptionally hard outer layer that covers the crown, the section of tooth above the gumline. Tooth enamel is the hardest part of the human body and is even stronger than bone.

Dentin: Hard tissue that forms the body of the tooth.

Pulp: "Living Core" in the center of the tooth; contains nerves and blood vessels.



Gum Tissue: Soft tissue that covers and protects roots of teeth and surrounding bone. Healthy gums are pink, stippled (appearance of engraved points), tough, and have a limited sensibility to pain, temperature, and pressure.

Primary ("Baby") and Permanent Teeth

- "Baby teeth" or primary teeth form before birth. Most children have 20 primary teeth by age 3
- Most people eventually have 32 permanent teeth, including wisdom teeth
- The health of baby teeth can impact the health of permanent teeth, so it's important that kids practice good oral care habits every day
- Some children are frightened when they begin to lose their primary teeth

They can be reassured that losing their baby teeth is a natural part of growing up, and that new, permanent teeth will quickly replace the teeth they lose.

PAUSE-AND-PLAY

After Chapter 1 is complete, pause the video and ask a few follow-up questions to reinforce the lesson that was provided:

- Tell me, what happens to your baby teeth?
- How many layers does each tooth have?
- What are the 3 layers?
- What are gums?

Next, select a Pause-and-Play activity to enhance the lesson:

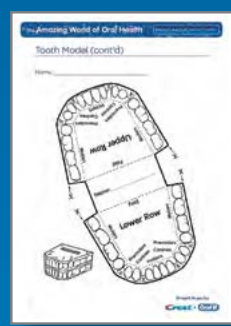
- “How I Lost My Tooth” [see pages 14 and 15 of this PDF]

The “How I Lost My Tooth” worksheet is an engaging activity to round out Chapter 1 of the video. Each student can circle an image or draw their own to finish a sentence that is read out loud.



- “Tooth Model” [see pages 16 and 17 of this PDF]

The “Tooth Model” worksheet is another hands-on activity to round out Chapter 1 of the video. Each student glues, colors, and cuts out model teeth and gums to assemble the model.



Other Activities

- “Spot the Difference” sheet



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CHAPTER 2: How Plaque Harms Teeth & Gums

Chapter 2 of the video will instruct your students on facts about the overall health of teeth, including information about plaque bacteria and cavities. The background information below will help round out any information relevant to the video that you may share with your students.

BACKGROUND: Oral Health and Dental Nutrition

Plaque—This is a nearly colorless film on teeth; contains acid-producing bacteria that cause decay.

- Foods with sugar or starch feed acid-producing bacteria, which attack tooth enamel
- Over time, plaque build-up can turn into tartar, a crusty deposit that can trap stains on the teeth
- Tartar creates a strong bond that can only be removed by a dental professional
- Plaque build-up can cause mild inflammation in the gums known as gingivitis

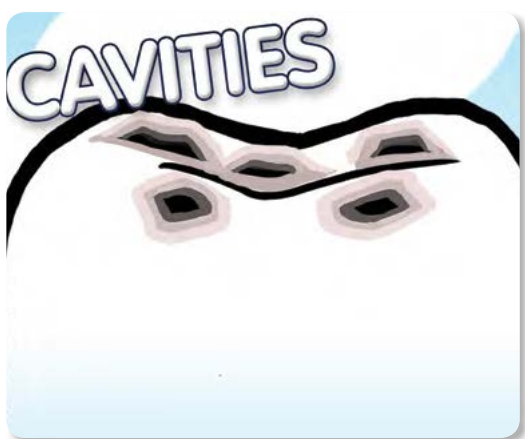
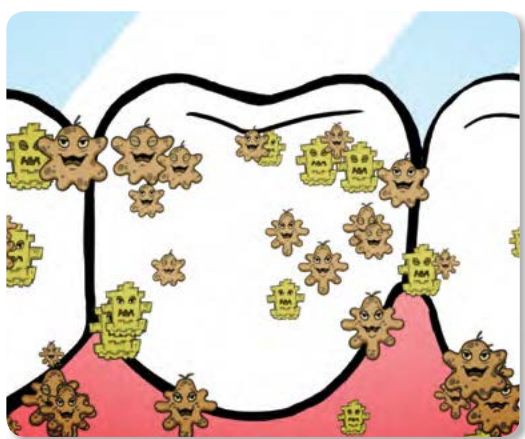
Gingivitis—This is an early form of gum disease. The signs include red, swollen, or bleeding gums.

Cavities—After repeated attacks of plaque acids on teeth, a hole (or cavity) can form.

Healthy Eating—Kids should be encouraged to choose nutritious snacks such as raw vegetables and fruits. Sugars and starches can contribute to tooth decay.

Help kids prevent plaque, gingivitis, and cavities through:

- Brushing for 2 minutes, at least twice a day (ideally after meals and snacks), rinsing (according to directions), and daily flossing
- Regular dental check-ups
- Limit sugary sodas and sports drinks. **Note: Snacking or sipping on sugary food or drinks over extended periods of time can be especially harmful**



PAUSE-AND-PLAY

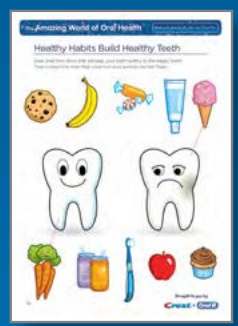
After Chapter 2 is complete, pause the video and ask a few follow-up questions to reinforce the lesson that was provided:

- What did you learn about plaque?
- What kinds of food and drink are plaque germs most attracted to?
- What can happen if plaque is left on teeth?
- If you have gingivitis, what do your gums look and feel like?

Next, select a Pause-and-Play activity to enhance the lesson:

- “Healthy Habits Build Healthy Teeth” [see page 18 of this PDF]

The “Healthy Habits Build Healthy Teeth” exercise rounds out the end of Chapter 2 in the video. Each student receives a handout with images of various food, beverage, and toothpaste products, and teeth. Students can draw lines to connect the healthy foods/drinks with the “happy” tooth and the unhealthy food/drinks with the “sad” tooth.



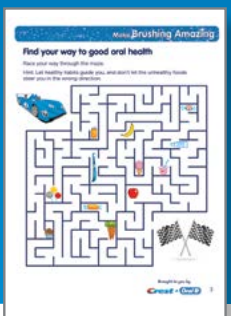
- “Tooth Decay in an Apple Experiment” [see pages 19 and 20 of this PDF]

The “Tooth Decay in an Apple Experiment” is a great experiment that visually helps students grasp how tooth decay and cavities occur, as it relates to the enamel of their teeth. NOTE: This exercise requires slightly more preparation and execution time (2 days).



Other Activities

- “Find Your Way to Good Oral Health”
- “Magical Brushing Word Search”



CHAPTER 3: Keeping Teeth & Gums Healthy Every Day

Chapter 3 of the video will inform students about the importance of taking care of their teeth every day. Brushing, flossing, and rinsing tips to support good oral hygiene are included. The background information below will help round out any information relevant to the video that you may share with your students.

BACKGROUND: Oral Care Tools

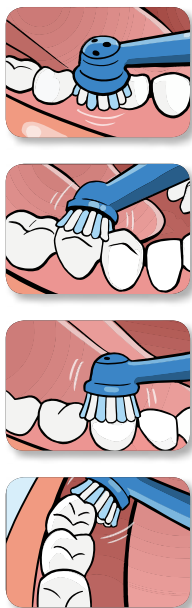
Toothbrushes

- Parents need to select a brush that is the right size for their child’s mouth
- Dentists may recommend a brush with very soft bristles for gentle care of gums
- Kids should brush at least twice a day, for 2 minutes each time. The Disney® Magic Timer™ App by Oral-B is a FREE tool that parents can download onto a tablet or smartphone to help encourage longer brushing
- For kids 3+, an electric toothbrush may be recommended. Electric toothbrushes are safe and effective when used as directed and can offer advantages in plaque removal. Kids also find them to be fun. **Note: Electric toothbrushes from Oral-B leverage the same technology as the adult electric toothbrush from Oral-B, which is the brand used most by dental professionals globally**



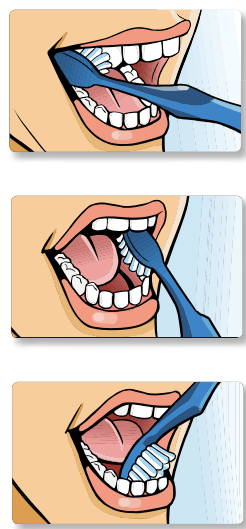
How to use an electric toothbrush

- Start with the outside surfaces of the teeth and guide the brush slowly from tooth to tooth. Hold the brush in place for a few seconds before moving on to the next tooth
- Repeat the same action on the inside surfaces of the teeth, on the chewing surfaces, and behind the back teeth
- Direct the brush head along the gumline and on the gums. Do not press hard or scrub
- Try grazing the brush head along your tongue and the roof of your mouth, back to front, to help freshen your breath



How to use a manual brush

- Inside and outside of every tooth: Place the brush at a 45° angle. With short strokes, move the brush from the gums toward the edges of the teeth
- Chewing surfaces: Hold the brush flat and brush back and forth
- Inside surfaces of front teeth: Tilt the brush up or down and use gentle strokes with the tip of the brush
- Gently brush your tongue in a back-to-front sweeping motion to freshen your breath



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Toothpaste

- A fluoride toothpaste is beneficial for kids to use, as it fights cavities and strengthens tooth enamel. Gentle abrasives, such as silica, are also common ingredients that help remove cavity-causing plaque and polish teeth
- Kid-friendly, flavorful toothpastes are available and can make the experience even more fun
- Kids should use a pea-sized amount of a fluoride toothpaste that provides cavity protection and should spit out the remaining toothpaste when finished brushing. Parents of children under 2 years of age should consult a dentist prior to use of fluoride toothpaste



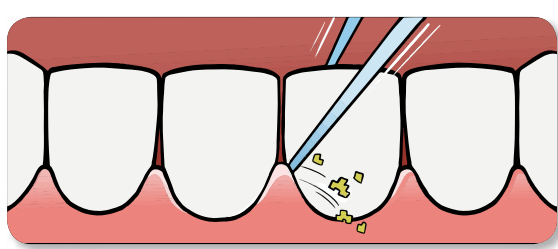
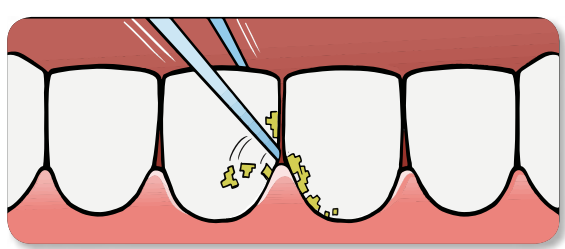
Floss

- Helps remove plaque between teeth and below the gumline, and also helps prevent gingivitis, an early form of gum disease
- Children should floss as soon as their teeth begin to touch
- Until about age 8, most children need parents' help because they don't have the dexterity to floss
- Kid-friendly flossing products are available. For example, "flossers" with a plastic handle can make it easier for kids to floss, and, thereby, may encourage them to floss regularly



How to floss

- 1** Wrap the ends of the floss around the middle fingers (recommended floss length is 8" to 24").
- 2** Hold the floss between the thumb and middle finger, leaving about 1" of floss between hands.
- 3** Gently work the floss between teeth. Once you reach the gumline, curve floss into a "C" shape around the tooth and make sure to go below the gumline.
- 4** Gently glide the floss up and down several times between each tooth, including the back teeth.



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Rinse

- A fluoride rinse fights cavities and reaches areas where brushing alone may miss
- Children aged 6 to 12 years should use a rinse under a parent’s supervision until capable of using independently to minimize swallowing
- Always read and follow the instructions on mouth rinse label
- Rinse should be used in conjunction with brushing and flossing
- Kid-friendly rinsing products are available to make the experience even more special



Dental Check-ups

Ideally, children should visit a dentist:

- Within 6 months of the eruption of the first baby tooth
- Then twice a year or as recommended by the child’s dentist

At a check-up, the dentist and/or dental hygienist will:

- Examine the child’s mouth for early signs of decay or other problems
- Monitor growth of teeth
- Clean the teeth
- If necessary, strengthen the teeth with a fluoride treatment
- Sometimes recommend sealants—clear plastic coatings over the chewing surfaces of back teeth, where decay most often occurs. Sealants shield uneven surfaces from food and plaque



If children are anxious about going to the dentist, you can ease their fears with a few simple facts:

- Dentists and dental hygienists are friendly people who help to keep teeth healthy
- Explain what happens at a dental check-up and why
- Ask a local dentist or hygienist to visit your class

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PAUSE-AND-PLAY

After Chapter 3 is complete, pause the video and ask a few follow-up questions to reinforce the lesson that was provided:

- Are there any tools that you were not familiar with until today?
- Which oral care tool do you like using the most?
- Who can tell me how long you should brush your teeth? How many times a day?
- What does fluoride toothpaste do?
- Raise your hand if you've already used floss.
- Why is it important to rinse?

Next, select a Pause-and-Play activity to enhance the lesson:

- Fun “Eggsperiment” [see pages 21, 22 and 23 of this PDF]

“The Crest Eggsperiment” is a unique activity designed to make learning about proper brushing fun and engaging for kids. The experiment shows kids why it’s important to brush properly and frequently, and how Crest helps protect their teeth from acid. NOTE: This activity can take up to 6 days to do.

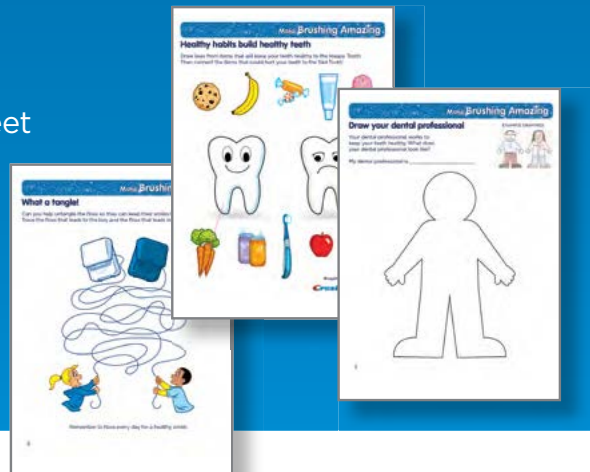
- Flossing Practice [see page 24 of this PDF]

“Flossing Practice” is a hands-on activity to help students get familiar with flossing technique by trying it out on a larger scale. Students supply foam egg cartons and dental floss or yarn, then learn how to hold floss and guide it between their practice “teeth.”



Other Activities

- “What a Tangle!” sheet
- “Healthy Habits Build Healthy Teeth” sheet
- “Draw Your Dental Professional” sheet



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Summary

Thank you for choosing the Crest + Oral-B Dental Education Program. We hope you and your class enjoy *The Amazing World of Oral Health* and walk away with some valuable lessons. Through this program, kids should learn the following information:

- ✓ Parts of the tooth
- ✓ Differences between baby and permanent teeth
- ✓ Facts about plaque, tartar, gingivitis, and cavities
- ✓ Importance of nutrition and healthy eating habits
- ✓ Daily oral care
- ✓ Techniques for brushing, flossing, and rinsing
- ✓ Importance of regular dental check-ups



If you need additional information or have suggestions for how to enhance this program, please contact us. We are always working to support you and the kids in your class.

How I Lost My Tooth

Activity

Finish the sentence: Students circle the picture and word(s) that best completes each sentence or they can write their own words about how they lost their first tooth. Students can color the pictures of their stories, and they can read their stories to the class, adding details if they like.

Learning Objective

Personalizes the dental-health lessons for each student by telling the story of losing their first tooth; reinforces language arts skills

Materials

Reproducible PDF; colored pencils, crayons or markers

Preparation Time

A few minutes to print the PDFs

Group Size

Individuals, small groups or class

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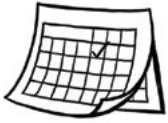


How I Lost My Tooth (cont'd)

Name _____

Do you remember how you lost your first tooth? Circle the picture that best completes each sentence to tell the story about losing your tooth or draw your own picture.

1. I wiggled my tooth when it was loose for



1 day



3 days



Many days

Other _____

2. When my tooth finally came out, I was



Eating



Sleeping



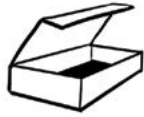
Playing

Other _____

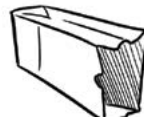
3. I put the tooth in



An envelope



A box



A bag

Other _____

4. When I woke up, I found under my pillow



One coin



Many coins



Paper money

Other _____

5. The funniest place I ever lost a tooth was

 (Write or draw your own answer.)

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Tooth Model

Activity

Print a tooth model for each student. Each student glues the page onto a piece of construction paper, colors and cuts out the model teeth and gums, and follows the assembly directions on the model. Review the types of teeth on the model to show how each tooth helps us eat different types of food.

Learning Objective

Reinforces the dental health lessons, as well as art skills and dexterity

Materials

Reproducible PDF; scissors; glue; colored pencils, crayons or markers

Preparation Time

A few minutes to print PDFs and gather art materials

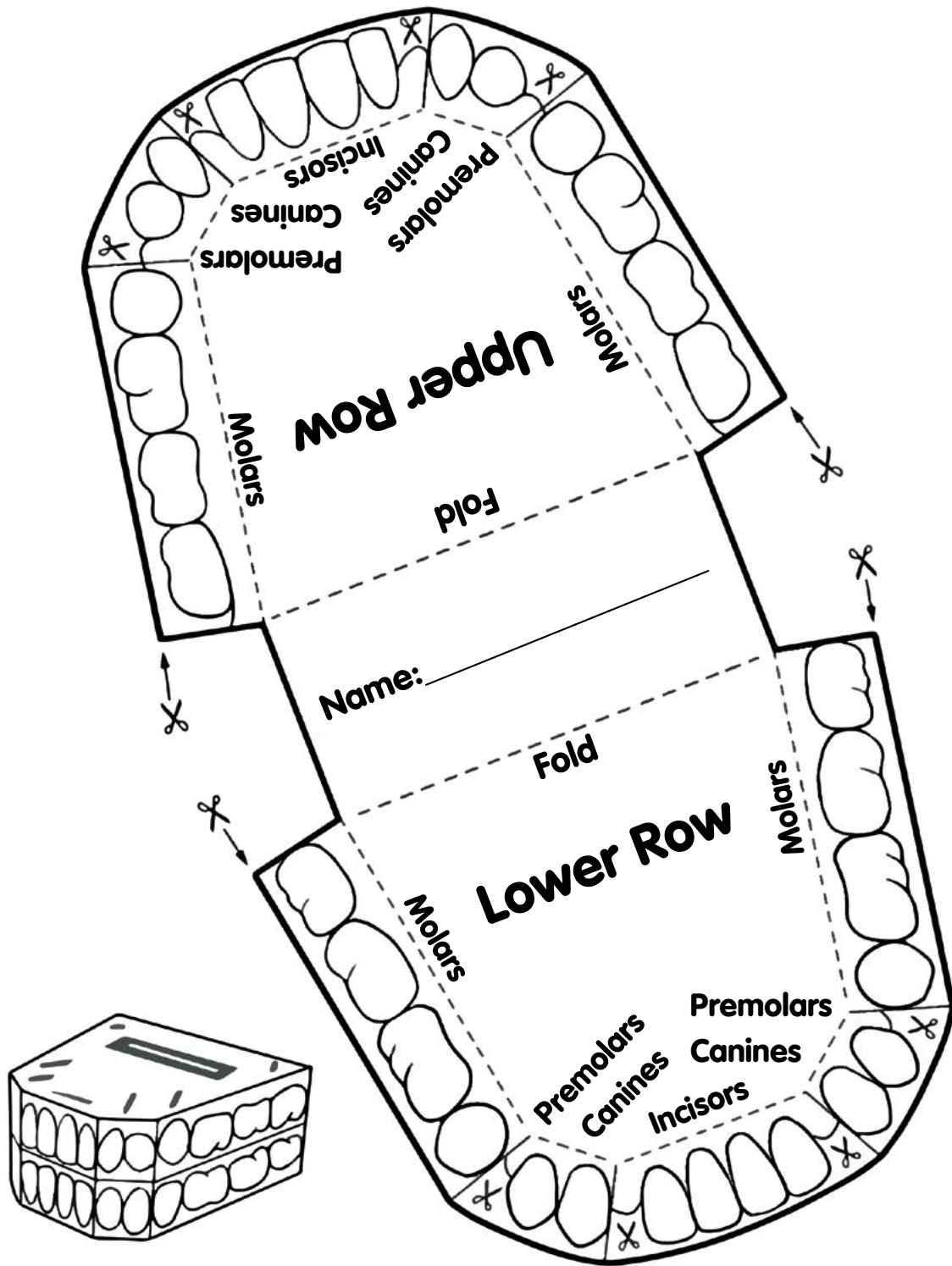
Group Size

Individuals, small groups or class

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Tooth Model (cont'd)

Name _____

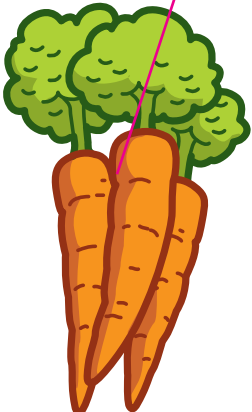
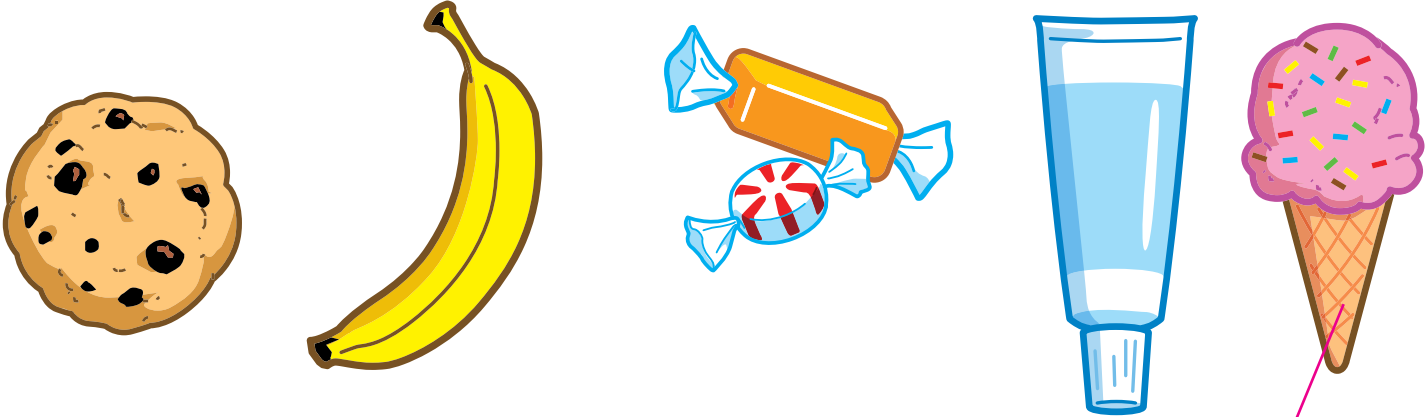


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Healthy Habits Build Healthy Teeth

Draw lines from items that will keep your teeth healthy to the Happy Tooth. Then connect the items that could hurt your teeth to the Sad Tooth.



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“Tooth Decay” in an Apple Experiment

Learning Objectives

Demonstrate to students that tooth decay and cavities are the result of a process that begins on the enamel of teeth. It is an excellent example of modeling and of a science experiment, and it also meets the National Science Education Standard for science as inquiry.



Materials

- Apples—1 experimental apple per student, small group or class
- 1 control apple per class
- Paper “lunch” bags—1 per apple
- Sharpened pencils

Preparation Time

Time to acquire apples and paper bags before beginning the lesson/experiment

Average Activity Time

15 minutes per day; minimum 2 days

Group Size

This experiment can be conducted with a single experimental apple and control apple for the entire class, with experimental apples for small groups of 2 or 3 students, or with an experimental apple for each student.

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“Tooth Decay” in an Apple Experiment (cont’d)

Activity Description

1. Ask students how an apple can be a “model” for a tooth.

An apple’s peel/skin can be compared with tooth’s enamel, and its inside can be compared with dentin inside a tooth.

(Record student comments throughout the experiment on the board or a flip chart.)

2. Ask what might happen if someone used a pencil to poke a hole in the apple, and how this might be a model for tooth decay.

3. Invite a student to poke a hole in the experimental apple.

Place each apple, experimental and control, in its own paper bag, and label each bag. Ask students to predict what will happen to the apples over the next day.

4. The next day, remove the experimental apple from its bag. Cut it open. (This is a job for the teacher only—not for students!) The fruit around the hole will have turned brown, soft, and “rotten.” Cut the control apple open too.

Ask students to compare the appearance of the apples to their predictions, and then discuss how accurate their predictions were and why.

Just like the pencil penetrated the peel and caused the fruit to rot, bacteria can penetrate a tooth’s enamel to cause decay.

5. Ask students to compare—in a discussion or in writing—what they’ve seen in the apples with what can happen to a tooth.

Reemphasize the importance of dental hygiene in removing plaque from teeth to promote dental health and prevent cavities.

The Crest Eggsperiment

Activity Description

Getting kids excited about brushing their teeth isn't always easy. But showing them why brushing matters can go a long way.

The Crest Eggsperiment is a simple experiment that you can do at home or in the classroom. Kids get to see firsthand how teeth can become soft and weak if they are exposed to acids (such as those in everyday foods), and how an anticavity toothpaste can help protect teeth.

Preparation

This experiment takes 5 to 6 days. If you are doing this experiment at home, we recommend you start on a Thursday or Friday afternoon, so that you can perform all the steps right after school or dinner.

This experiment uses eggs to represent teeth and vinegar to represent the acids that are made by plaque bacteria, which cause tooth decay and cavities. Both eggshells and teeth can be weakened by acid, which is why good dental hygiene is so important.

What you will need:

- 4.6 oz. tube of Crest® Cavity Protection Toothpaste (active ingredient: sodium fluoride)
- glass measuring cup
- fresh eggs without cracks (use several in case one gets broken by accident)
- ordinary vinegar
- teaspoon
- plastic wrap
- marker
- clear nail polish
- paper towels

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The Crest Eggsperiment (cont'd)

Conducting the Eggsperiment

Follow these easy steps:

1. Allow eggs to warm to room temperature. With clean hands, wash the egg with water and dry with the paper towel.
2. Empty the entire tube contents of Crest® Cavity Protection Toothpaste into the measuring cup and pat down with a teaspoon to level toothpaste and remove any air bubbles.
3. Mark one side of the egg with a marker and cover this mark with clear nail polish to protect it from the vinegar.
4. After the nail polish has dried, place the egg into the measuring cup, with the marked side down, so the Crest toothpaste covers half the egg. Make sure the egg does not touch the bottom of the cup.
5. Cover the cup tightly with plastic wrap and leave it in a safe place at room temperature for at least 4 full days (96 hours).
6. After the treatment, with clean hands, rinse the Crest toothpaste off the egg with warm tap water and let the egg dry overnight.
7. Pour enough vinegar into the clean measuring cup to cover the egg, and then carefully place the egg into the vinegar with the spoon. Rest the spoon on top of the egg to keep it submerged under the vinegar, and cover the cup with plastic wrap. You'll notice bubbles starting to form on the side of the egg that was not treated with Crest.

Continued on next page

The Crest Eggsperiment (cont'd)

8. Leave the egg in the vinegar until the untreated side (the unmarked side) of the egg softens. This will take 7 to 13 hours.
9. After 7 hours in the vinegar, remove the egg and check if the side not treated with Crest has softened by tapping it very lightly with your finger or a pen. If soft, go on to step 11.
10. If the untreated side is still hard, put the egg back into the vinegar. Check the egg every hour or two afterwards until the untreated shell has softened.

Note: If you are not going to be home after the egg has soaked for 7 hours, take the egg out of the vinegar and wash it in warm water. Write down how many hours it was in the vinegar. As soon as you return, put the egg back into the vinegar and continue checking it every hour or so for softness. But be sure not to leave the egg out of the vinegar for more than 12 hours.

11. When the untreated side is soft, remove the egg and gently wash it with warm tap water. The egg is very fragile now, so be careful.

The Conclusion

By gently tapping both sides of the egg, you can now see 2 effects:

- Acid has made the side of the shell not treated with Crest soft and weak.
- Crest Cavity Protection Toothpaste (with sodium fluoride) has protected the shell and kept it hard and strong.

This experiment shows the importance of brushing to keep teeth strong and healthy and protected from acid attack.

Flossing Practice

Activity

Reinforce the importance of flossing while students learn and practice proper flossing technique. Enlist students' help to collect foam egg cartons—one carton for every 2 students.

Cut off the carton lids; then cut the bottom of each carton in half lengthwise to create 2 rows of 6 egg-carton "teeth." Give each student a row of "teeth," an 18-inch length of floss or yarn, and 2 pieces of tape to secure each end of his/her "teeth" to the desktop.

Demonstrate:

1. How to wrap the floss around the middle finger of each hand.
2. How to hold the floss with the index fingers and thumbs.
3. How to guide the floss gently between "teeth," then pull the floss up, down, and around to clean both sides of the teeth and the gum area. Send the egg-carton "teeth" home for continued practice and challenge students to practice on their real teeth too!

Learning Objective

Teaches students to floss thoroughly by giving them a large and easily visible model to practice on

Materials

Foam egg cartons (1 carton for every 2 students); dental floss or yarn; transparent or masking tape

Preparation Time

30 minutes to gather materials and cut egg cartons