



# Dr. Rabbit and the TOOTH DEFENDERS



An Oral Health  
Education Program  
For Grades 2 – 3

## Dear Teacher,

Welcome to **Colgate Bright Smiles, Bright Futures!** You are now part of a **21-year legacy** that brings positive oral health messages to children across the world — in classrooms just like yours.

### A Global Partnership

Each year, Colgate-Palmolive Company’s award-winning Colgate Bright Smiles, Bright Futures® (BSBF) global oral health education program reaches over 50 million school children and their families ... in 30 languages and 80 countries. It’s teachers like you who have made this self-esteem-based program an international success!

Colgate recognizes that fostering partnerships between governments, health and educational organizations, professional associations, and health care providers strengthens the impact of the BSBF initiative around the world. The BSBF program was developed with an International Advisory Board of educational, dental and multicultural experts, and tested with children and teachers in real classrooms. Together with classroom educators like you, it’s a true partnership in support of children’s health!

### BSBF: Empowerment for the Future

Bright Smiles, Bright Futures gives teachers, children and families around the world the tools they need to make good oral health a permanent part of their lives. With the focus on prevention, the program builds self-esteem and teaches good oral health practices to create lifelong habits. And most importantly, BSBF inspires kids to **take control of their own oral health**. Its messages of empowerment enable children to not only understand “what” to do to take care of their teeth and gums, but the “why” behind the messages. In this way, BSBF equips them to become lifelong **Tooth Defenders**.

Welcome to BSBF. We applaud your commitment to helping your students’ bright smiles last a lifetime.

#### Marsha Butler, DDS

BSBF Global Oral Health Initiative  
Colgate-Palmolive Company



## Thank You to Our Advisors!

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## About the Program

Since 1991, Colgate Bright Smiles, Bright Futures (BSBF) has made it easy for teachers like you to integrate oral health in your classroom. Now, the newest program in the BSBF series wraps the tried-and-true appeal of superheroes and special powers into a program that is sure to excite your students!

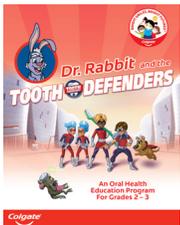
This engaging, activity-based program fits into your existing curriculum, so you don't need to add a new unit to your busy day. Its standards-based approach helps make it easy to cover core learning objectives, and it's also flexible, so you can adapt it to your own classroom needs. And best of all, your students will love it!

- The **multimedia components** feature Dr. Rabbit and Dr. Brushwell — two cartoon dentists who have mentored a group of children to become Tooth Defender “superheroes.” Together, the team undertakes a mission to protect Tooth City from the sticky, sugary villain: Placulus!
- The **easy-to-use materials** were developed with teachers and oral health experts from around the world. In addition to fitting into your curriculum, the developmentally appropriate components are designed to challenge children to take responsibility for their own oral health.
- **Family involvement** is an important part of the BSBF methodology. You'll find ideas for getting parents and other family members involved with the topic of oral health included throughout the guide.

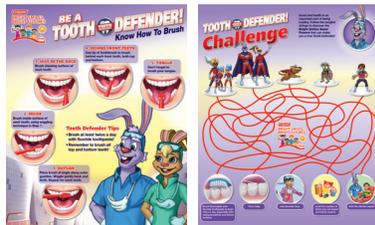
Now, take a look at the materials – then invite your students to team up with Dr. Rabbit and the Tooth Defenders and become superheroes in protecting their own bright smiles!



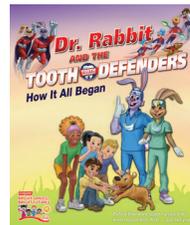
## Components At-a-Glance



Teacher's Guide with Classroom Activities



Two-sided Poster:  
— **Be a Tooth Defender!** How to Brush  
— **Tooth Defender Challenge:** Discover Your Bright Smiles Super Powers



Storybook:  
**Tooth Defenders: How It All Began**



Parent Take-Home:  
**Your Child's Bright Smile**



Video:  
**Dr. Rabbit and the Tooth Defenders**

## Bright Smiles Key Messages

- Brush with fluoride toothpaste twice a day, especially after eating breakfast and before bedtime
- Floss daily
- Use fluoride rinse
- Limit the number of times you eat sweet and sticky snacks
- Visit the dentist regularly
- Oral health is an important part of overall health

### “Prepare the Lesson” Key:

- Supplies Needed
- ▶ Pre-lesson to-dos

# LESSON #1

## Tooth Defender Training Starts with a Smile!

### Lesson at a Glance

In this introductory lesson, students begin their Tooth Defender training by exploring bright smiles and how oral health relates to their everyday lives. They also take their smile exploration home to share!

### Prepare the Lesson

- Gather paper and crayons or colored pencils
- ▶ Make copies of the **Sharing Bright Smiles** handout for each student

 **Time Required: 30 minutes**

#### “Prepare the Lesson” Key:

- Supplies Needed
- ▶ Pre-lesson to-dos

**Ready for Action!**

#### 1. Engage: Share a Smile

- What does a bright smile look like? Challenge students to answer this comic riddle — it will bring a smile to their faces! What do you get if you cross a porcupine with a giraffe? (Answer: A long-necked toothbrush)

#### 2. Explore: Tooth City Scavenger Hunt

- Distribute copies of **Sharing Bright Smiles** to each student. Using partners as models, each student will draw a bright, healthy smile.
- Invite students to showcase their smile portraits on the **Bright Smiles** bulletin board (see box below) and share what they know about oral health:
  - What do we use our teeth for? (Talking, smiling, eating, chewing)
  - What does oral health mean? (Oral health means teeth and gums are strong and healthy; good oral health is an important part of overall health)
  - Who is in charge of keeping our teeth healthy? (WE are - with help from parents for flossing, and the dental professional to check our teeth regularly)
  - How can we keep our smiles shining? (Share Key Messages from page 3; post them on the Bright Smiles bulletin board)



#### Bright Smiles Alert

Oral Health is an important part of overall health!

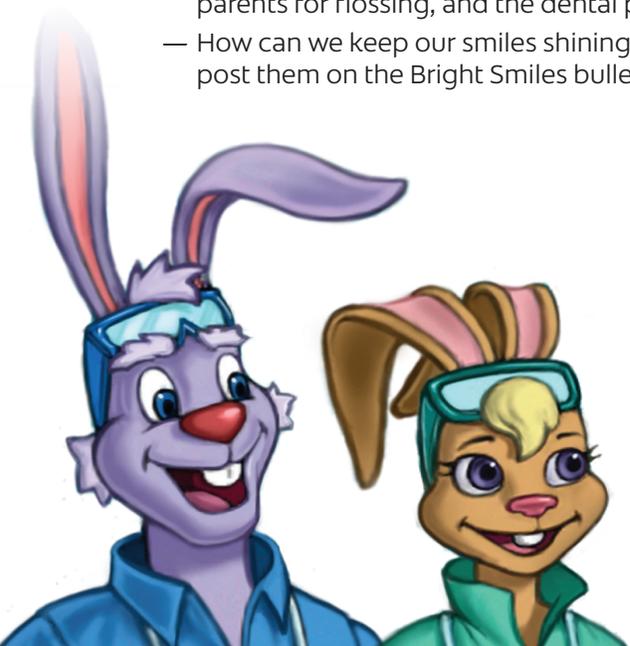


#### Smiling At Home

Ask students to bring their **Sharing Bright Smiles** handout home to interview family members and discover what makes them smile.

#### Bright Smiles Bulletin Board

Throughout your BSBF classroom exploration, showcase your students’ accomplishments as “Tooth Defenders in training!” Create a Bright Smiles bulletin board to display projects from all of the lessons, along with the posters.





# MISSION #1

## Sharing Bright Smiles

Start your Tooth Defender training with a “smile exploration!”

\_\_\_\_\_ Child's Name

Draw what a bright smile looks like:

Write or draw at least three things that make YOU smile!

How can I keep my smile bright?  
Draw or write your ideas:

Fill in the blanks:

My teeth are an important part of my smile. My teeth help me to:

\_\_\_\_\_  
\_\_\_\_\_ !

How can you share a smile with someone you love? Find out by asking someone in your family.

I asked \_\_\_\_\_  
what makes him/her smile. Here's the answer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# LESSON #2

## Dr. Rabbit and the Tooth Defenders

### Lesson at a Glance

It's time for students to meet their superhero mentors — Dr. Rabbit and Dr. Brushwell — along with their team of Tooth Defenders! They'll explore the video scene-by-scene and via a scavenger hunt; learn key oral health vocabulary; and discover why it's important to become a Tooth Defender!

### Prepare the Lesson

- Video: **Dr. Rabbit and the Tooth Defenders**, TV screen or projector
- Scene-by-Scene Showcase beginning on page 7
- ▶ Make copies of the handout **Tooth City Scavenger Hunt**, one for each student

**Time Required: 30 minutes x 2**

**Ready for Action!**

#### 1. Engage: Meeting the Tooth Defenders

- Have students share the name and power of their favorite superhero.
- Get the class geared up for the video: they are about to meet some superheroes called **Dr. Rabbit**, **Dr. Brushwell**, and the **Tooth Defenders!** In this adventure story, four children just like them embark on a mission to defend Tooth City by practicing good oral health habits and fighting Placulus (plaque).

#### 2. Explore: Tooth City Scavenger Hunt

- Play the video once through without interruption, reminding students to pay close attention to the details.
- Have students use the information from the video to begin the **Tooth City Scavenger Hunt** handout, completing what they can remember from the first viewing.

#### 3. Explain: Scene-By-Scene with the Superheroes

- Explore the oral health messages using the Scene-by-Scene Showcase. Play the video again, and pause after each scene to discuss new vocabulary and oral health points depicted.
- Have students review and complete their **Tooth City Scavenger Hunt** student handouts.

#### 4. Evaluate: Tooth Defender Trivia

- Write “Who, What, When, Where, Why” on the board. Challenge students to Tooth Defender Trivia, such as: Who are the characters? What was happening when the storm rained down? Where did Placulus attack?
- List responses on the board, and encourage students to ask their own challenging questions.



#### Bright Smiles Alert

Tooth Defenders use Bright Smiles Super Powers to fight plaque, which can lead to tooth decay!



#### Scavenger Hunt at Home

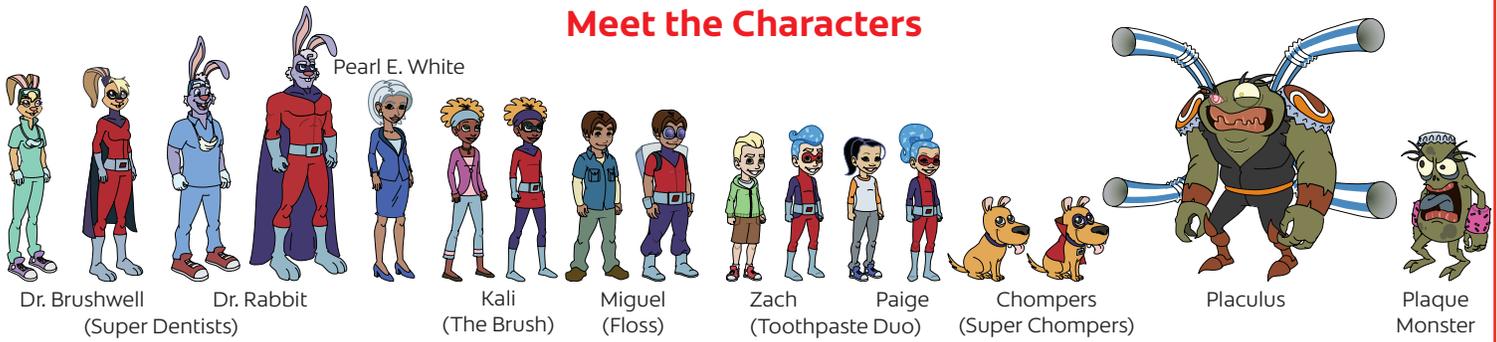
Ask students to do a scavenger hunt at home to see how many “Tooth Defender” (oral health) supplies they can find at home. Have them report back what they found, and identify what additional oral health items may be needed.

#### Answers to the Tooth City Scavenger Hunt handout:

1. Toothbrush; 2 times a day
2. FLOSS; 8 years old
3. Sweet and sticky foods
4. Sticky Candy, Soda, Gumdrop, Cupcake, Donut
5. PLAQUE; drawing of decaying tooth
6. Fluoride Toothpaste
7. FLUORIDE RINSE; (b) fight Placulus
8. Chompers convinces the boy to stop eating sweets.
9. Body. (Reinforce that a bright smile is something they can share proudly!)
10. Answers include: Fluoride toothpaste power, toothbrush power, floss power

## Scene-by-Scene Showcase

### Meet the Characters



The story begins in a young boy's bedroom — we zoom into his mouth and find ourselves in sparkling Tooth City, home of the Tooth Defenders!

Four regular kids – Zach, Paige, Kali and Miguel – wrap up a healthy breakfast and head off to brush their teeth. As they brush, they chat about the important must-dos for toothbrushing. But wait – they soon discover that their puppy pal, Chompers, needs help learning to take care of his teeth!



#### Explore:

What supplies do the kids use to brush their teeth? What are the important must-dos for toothbrushing?

#### Key Messages for discussion:

- Brush with fluoride toothpaste at least twice a day, especially after eating breakfast and before bedtime
- Never share your toothbrush
- Replace your toothbrush every 3 months or when it becomes “shaggy”
- Use a pea-sized amount of fluoride toothpaste and brush for two minutes

The kids launch into a musical anthem that highlights the importance of keeping a bright, shiny smile. Dr. Rabbit and Dr. Brushwell – everyone's favorite dentists – chime in to sing along!



#### Explore:

Sing along to the musical anthem with your students (see lyrics on page 18). Then ask: What did you learn from the song? Why is it important to keep a bright, shiny smile?

#### Key Messages for discussion:

- Brush with fluoride toothpaste twice a day
- Floss daily
- Use fluoride rinse
- Limit the number of times you eat sweet and sticky snacks
- Visit the dentist regularly
- Oral health is an important part of overall health

We travel to downtown Tooth City, where Dr. Rabbit and Dr. Brushwell are being interviewed by star reporter, Pearl E. White. Suddenly, skies above are filled with Plaque Monsters floating in their Acid Blaster Cruisers. The dynamic dentists call the Tooth Defenders into action!



#### Explore:

What do the Plaque Monsters do? Why are they bad?

#### Key Messages for discussion:

- Limit the number of times you eat sweet and sticky snacks
- Plaque is bacteria that mixes with food to cause acid. It can attack teeth every time you eat!
- The Tooth Defenders' key supplies include fluoride toothpaste, toothbrushes (replaced regularly), fluoride rinse, floss, and regular dental checkups.

## Scene-by-Scene Showcase

Time for action! The Tooth Defenders use their dental “powers” to fight off the Plaque Monsters and clean up Tooth City. Kali, “The Brush,” scrubs the buildings with fluoride toothpaste supplied by the Toothpaste Duo (Finn and Paige); Miguel, “Floss,” gets the plaque monsters hiding between the buildings (the teeth). Dr. Rabbit and Dr. Brushwell lend a hand and cheer on the Defenders – these two super dentists are always there as partners in oral health!



### Explore:

How do the Tooth Defenders keep the Plaque Monsters away? How do they brush the buildings (teeth) to clean them?

### Key Messages for discussion:

- Brush all surfaces of teeth: top, bottom, inside, outside, tongue
- Be sure to brush back molars/teeth way in the back
- Brushing with fluoride toothpaste helps strengthen teeth and fight plaque
- Flossing gets the plaque that brushing may have missed

Here comes Placulus! The sticky villain unleashes a Sweet Storm, hovering above the city in his cruiser as gumdrops rain down on Tooth City! Our heroes are in peril, as the non-stop sugary invasion creates an ever-increasing plaque reaction. The Tooth Defenders need to get to the source of the problem ... and aha! They realize that it's the boy. He is snacking non-stop on sticky sweets!



### Explore

What sticky sweets rain down on Tooth City during Sweet Storm? What happens to Tooth City during the storm?

### Key Messages for discussion:

- Sugary sweets cause a plaque reaction and put teeth at risk for decay
- Every time you eat, plaque acid can attack your teeth. That's why it's important to limit the number of times you eat snacks each day!

The Defenders are mired in sticky plaque – so it's Super Chompers to the rescue! He flies out of Tooth City and comes face to face with the boy, “miming” the situation and helping the boy realize that to stop the plaque attack, he mustn't snack all the time!



### Explore:

How does a plaque attack happen? How can it be stopped? What snacks should we avoid?

### Key Messages for discussion:

- Limit the number of times you eat sweet and sticky snacks
- Plaque is bacteria that mixes with food to cause acid. It can attack teeth every time you eat!

The Sweet Storm has subsided ... and the Tooth Defenders are back in action, unleashing their Bright Smiles Super Powers! The Brush has a final showdown with Placulus, brushing him thoroughly with fluoride toothpaste to get rid of him. He's gone for now ... but he'll be back, which is why good oral health habits are important every day.



### Explore:

How often should we brush our teeth? What parts of our mouth do we brush?

### Key Messages for discussion:

- Oral health is an important part of overall health!
- To get rid of plaque, it's important to brush all surfaces of the teeth: inside, outside, front, back, top, and bottom. And don't forget the tongue!

In our final scene, the Tooth Defenders, Dr. Rabbit, Dr. Brushwell and Pearl come face-to-face with the kid, reminding him that he can be a Tooth Defender, too. And so can YOU!



### Explore:

What does each Tooth Defender do? What are their super powers? How can YOU be a Tooth Defender?

### Key Messages for discussion/recap:

- Brush with fluoride toothpaste twice a day
- Floss daily
- Use fluoride rinse
- Limit the number of times you eat sweet and sticky snacks
- Visit the dentist regularly
- Oral health is an important part of overall health



# MISSION #2

Child's Name \_\_\_\_\_

## Tooth City Scavenger Hunt

You just met "Dr. Rabbit and the Tooth Defenders"! Use the clues below to find the missing details found throughout Tooth City!

**1** Kali's Super Power is the \_\_\_\_\_, on which she surfs around to defend Tooth City. How many times a day should you use this Bright Smiles Super Power to defend your mouth?  
\_\_\_\_\_



**2** Unscramble the letters to write an important oral health Super Power:

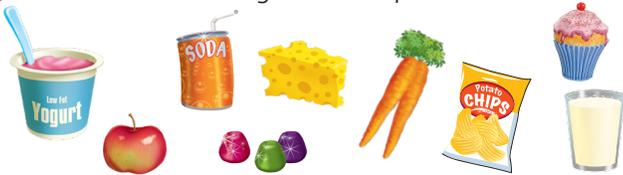
SFLSO \_\_\_\_\_

Use this every day — it removes the plaque that brushing may have missed. If you're less than \_\_\_\_\_ years old, you should ask your parents for help!

**3** Describe the kinds of foods that Placulus uses to attack teeth:  
\_\_\_\_\_



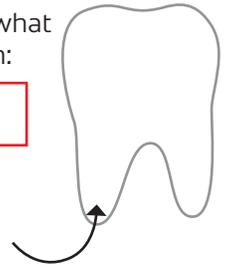
**4** Make an X through the foods that are some of Placulus' most dangerous weapons:



**5** Unscramble the letters to write what Placulus uses to harm your teeth:

LAPUEQ \_\_\_\_\_

Too much of this makes the buildings in Tooth City look like (draw)



**6** Paige and Finn shoot blobs of \_\_\_\_\_.  
Without this, Kali cannot do her job with the toothbrush.



**7** Add the missing letters and circle the best choice to finish the sentence:

F \_ UO \_ IDE \_ INSE is used by the Tooth Defenders to...

- a) Give Placulus a yummy snack
- b) Fight Placulus
- c) Color Tooth City blue



**8** How does Super Chompers save the day?  
\_\_\_\_\_  
\_\_\_\_\_



**9** Being a Tooth Defender is not only good for your mouth...it's good for your whole \_\_\_\_\_.

**10** If you could have any of the Bright Smiles Super Powers used by the Tooth Defenders, which one would you choose? Why?  
\_\_\_\_\_

# LESSON #3

# YOU can be a Tooth Defender!

## Lesson at a Glance

After meeting the characters from Dr. Rabbit and the Tooth Defenders, students further explore oral health behaviors. They discover how they, too, can be superheroes and fight off Placulus with their Bright Smiles Supply Kit... and they'll even act out an original Tooth Defenders skit!

**Ready for  
Action!**

## Prepare the Lesson

- Bring in samples of real Super Power supplies, if desired
- ▶ Make copies of the handout **Bright Smiles Supply Kit** for each student
- ▶ Using the handout, create a sample kit to show students
- ▶ Write the following questions on the board or large sheet of paper:
  - What is each Tooth Defender's super power?
  - How is their power used?
  - Why is this power so important for keeping a bright smile?

**Time Required: 30 minutes x 2**

### 1. Engage: What Makes a Superhero?

- Begin a class discussion by asking: What makes a superhero? How do superheroes act?
- Why are the Tooth Defenders superheroes? (They practice healthy behaviors to help themselves and others!)

### 2. Explore: Create a Superhero Supply Kit for Your Teeth

- Remind children that just like other superheroes, Tooth Defenders have special powers.
- Review the **Bright Smiles Supply Kit** handout and the sample kit with students. Show students how to use the handout to organize the oral health powers (dental supplies) and their instructions in their kits.

### 3. Explain: Act like a Tooth Defender

- Give a Tooth Defender Pop Quiz by asking students to name each superhero and identify his/her super power – Paige and Finn (Fluoride toothpaste), Kali (toothbrush), and Miguel (Floss), Chompers (fluoride rinse), Dr. Rabbit and Dr. Brushwell (dental checkup)
- Divide students into small groups based on their favorite superhero.
- Challenge teams to prepare unique skits dramatizing their Tooth Defender's superhero qualities, prompting them by asking:
  - What is the superhero's power?
  - How is their power used? Why is this super power so important?
- Have students perform their skits using their best superhero acting skills and clearest voices!



#### Bright Smiles Alert

Every student can use the Tooth Defenders' Super Powers to fight plaque! Share and discuss the BSBF Key Messages on page 3!



#### Bright Smiles Supply Kit at Home

Have students bring home their Bright Smiles Supply Kit and share with their family. What supplies do they need at home to complete their kit in real life?





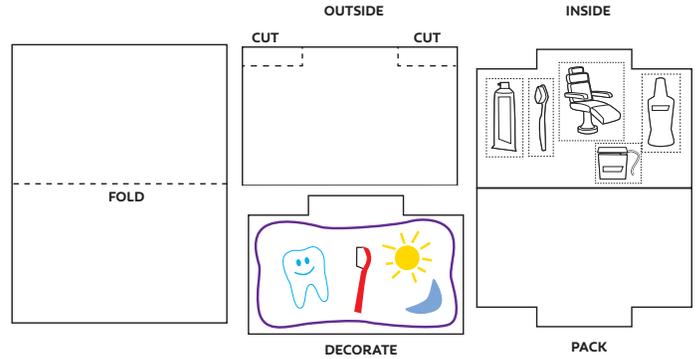
# MISSION #3

## Bright Smiles Supply Kit

Make your own Bright Smiles Supply Kit, equipped with superhero powers!

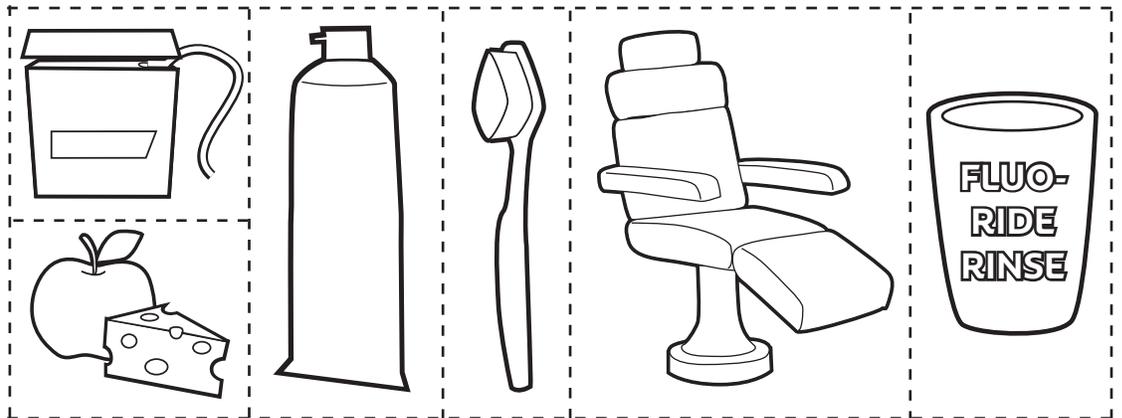
Child's Name \_\_\_\_\_

1. Fold a blank piece of paper in half – this will be your Bright Smiles Supply Kit.
2. On the outside, label and decorate your kit.
3. Cut out the Tooth Defender Super Powers from this sheet.
4. Color the powers and paste them into your supply kit.
5. Cut out the “How to Use the Powers”. Match them to the correct tool to explain how to use your Super Powers!
6. Take your kit home to share with your family!



### Bright Smiles Super Powers

Cut out each “power” and glue it into your Bright Smiles Supply Kit.



### How to Use the Powers

Cut out each “power” instruction and glue it into your Bright Smiles Supply Kit.

<p><b>Fluoride Toothpaste</b> Use a pea-sized amount each time you brush.</p>	<p><b>Toothbrush</b> Brush thoroughly at least twice a day.</p>	<p><b>Floss</b> Use this to remove plaque between teeth.</p>	<p><b>Dental Checkups</b> Visit the dentist regularly.</p>	<p><b>Fluoride Rinse</b> Rinse after</p>
<p><b>Limit Snacks</b> Limit the number of times you eat snacks each day, and choose nutritious snacks. They are more tooth-friendly and good for your overall health, too!</p>				

# LESSON #4

## Know the Enemy: The Science of Placulus

### Lesson at a Glance

Through a hands-on scientific exploration, the emerging Tooth Defenders in your class will discover how plaque causes tooth decay. After understanding how sugary foods are weapons for Placulus, students develop a superhero menu of foods to help defend their teeth.

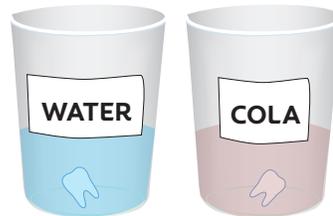
### Prepare the Lesson

- Paper, crayons or colored pencils
- 2 small “teeth” similarly sized. (If using a real tooth is not possible, try a piece of chicken bone, seashell, or eggshell. Make sure samples are uniform in size; at least 1 cm or 1/2 inch in diameter.)
- 2 clear containers (preferably glass)
- 1/2 cup sugary carbonated soda (cola), 1/2 cup water
- Rulers for student observations
- ▶ Make copies of **Placulus, the Villian of Tooth City** handout for each student



**Time Required:** 30 minutes x 2 (Note: Set up of science experiment will be done first, then set aside and observed over one week. Regroup for final observations.)

**Ready for Action!**



#### 1. Engage: It's Invisible!

- Pose the following questions:
  - What does it mean to be invisible?
  - If you were a superhero, would you want to be invisible? What if you were a villain?

#### 2. Explore: Placulus, the Villain of Tooth City

- Tell students that even though we can't always see him, Placulus can harm our teeth! Everyone has plaque bacteria in their mouths. When it mixes with food, it creates plaque acid that attacks teeth and can lead to decay. Plaque builds up over time, and can make teeth feel “fuzzy” and cause a visible film on the teeth.
- Guide your superhero student scientists through the experiment outlined in the **Placulus, the Villain of Tooth City** handout to observe first-hand how sugary foods can affect our teeth.
- Explain to students that each step of the experiment part of the scientific method. Before they begin they should note their observations of each sample carefully. They will use this information to compare the resulting observations at the conclusion of the experiment.
- Help students place one “tooth” into each container and gently pour the liquids — cola in one, water in the other. Create a label with the date and sample liquid. Encourage students to note their observations each day. At the conclusion of the experiment, have them re-measure each sample.  
**Note:** Results of the experiment may vary by a few days. The sample in water will not change. Over time, the sample submerged in soda (cola) will begin to discolor (turn brownish-black), turn brittle and decay.



#### Bright Smiles Alert

Everyone has plaque bacteria in their mouths. When it mixes with food (or any beverage other than water), plaque creates acid that can attack teeth and lead to decay.



#### Healthy Snacks at Home

Have students share their recommendations for tooth-friendly snacks with their families. They can also make a family snack log to see how often during the day the family might be experiencing “plaque attacks”!

- Ask students to discuss what they noticed about the samples, and describe how they changed. Based on their observations, what are their conclusions? What happened to the teeth? What powers can we use to defend our teeth from Placulus? Alert students about the Super Power of fluoride toothpaste: it can defend teeth against plaque!

### 3. Explain: Combat Placulus with a Smart Snack Decisions

- Review the types of snacks that give Placulus the most power to damage Tooth City: Sweet, sticky snacks. And in addition, these types of snacks offer few or no beneficial nutrients. That’s why it’s better to choose snacks that are delicious and nutritious, like vegetables, fruits, and low-fat dairy products!
- Have students work in small groups and lists their favorite healthy snacks that don’t give an extra boost to Placulus. Examples: vegetables, fruits, and low-fat dairy products. Display lists on the Bright Smiles bulletin board to make a snack menu fit for superheroes.
- Introduce the concept of “frequency” of snacking: Every time you eat a snack, there is a “plaque reaction” that creates acid. It lasts for 20 minutes, and can lead to decay. The more times you eat during the day, the more often you have harmful plaque acid at work!

#### Frequency of Snacking



##### Snack One Time:

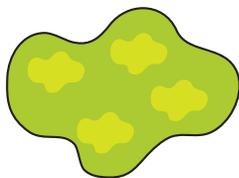
5 candies eaten at 1 time = **ONE** plaque attack/**20** minutes of plaque reaction



##### Snack Multiple Times:

5 candies eaten at 5 different times = **FIVE** plaque attacks/**100** minutes of plaque reaction

#### Here’s how the villain Placulus causes tooth decay in our mouths:



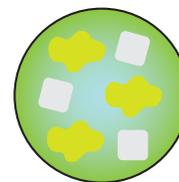
#### PLAQUE

Bacteria in the mouth. Everyone has them!



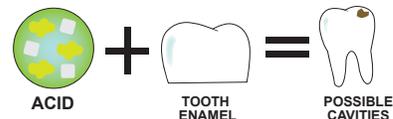
#### FOOD

Every time we eat or drink anything except water, it mixes with plaque to create plaque acid (a “plaque attack”). Sweet and sticky foods are the most harmful – especially hard candies that dissolve slowly and stay in the mouth longer, causing an extended “plaque attack.”



#### ACIDS

The “plaque attack” lasts for 20 minutes. It creates acids that can lead to tooth decay





# MISSION #4

Child's Name \_\_\_\_\_

## Placulus, the Villain of Tooth City

Discover what happens when we don't defend our teeth from Placulus!

**Here's what you'll need:**

- 2 small "teeth"
- 2 clear containers
- 1/2 cup water
- 1/2 cup carbonated soft drink (cola)



### 1. Powers of Observation

Observe the "teeth" closely. (If you are using bone or another item instead of real teeth, describe it here):

- What color are they?
- How big are they (use a ruler to measure)?
- What do they feel like?
- Draw one of the teeth:

### 2. Powers of Prediction

What do you think will happen to each "tooth" when it is left for one week in each liquid? Why?

- The tooth left in WATER will...

Explain your answer:

- The tooth left in COLA will...  
Explain your answer:

### 3. Powers of Experimentation

- Put one "tooth" into each container
- Pour water into one container, and cola into the other.
- Be patient! Check each day to notice any changes. Write down your observations each day.
- Leave the "teeth" in their liquids for one week. (Note: results may vary. Some experiments may need extra days.)

### ONE WEEK LATER...

### 4. Powers of Discovery

What has Placulus' sweet storm done to our "teeth"?

Remove each tooth from its liquid, and record your observations here



**WATER**

The color is:

The tooth feels:

The size of the tooth is:

Here is a drawing of the tooth:

**COLA**

The color is:

The tooth feels:

The size of the tooth is:

Here is a drawing of the tooth:

### 5. Powers of Prevention

What happened to the teeth?

What powers can we use to defend our teeth from Placulus?

# LESSON #5

## Practice Your Powers: Brush Like a Tooth Defender

### Lesson at a Glance

Students learn the best way to get rid of plaque by practicing proper brushing techniques. They embark on a mission to make Tooth Defender strategies a lifelong habit.

### Prepare the Lesson

- Clock, watch or timer
- ▶ Display the **Tooth Defenders' Poster (Side #1)**
- ▶ Copy **Training for a Superhero Smile**, one for each student.

 **Time Required: 30 minutes**

**Ready for Action!**

#### 1. Engage: Counting our Pearly Whites

- Ask your students to guess how many teeth they have. Give students 15 seconds to answer the challenge!
- Have each student count his/her teeth and record the numbers on the board. (**Note:** Answers will vary. Children under the age of 6 have 20 primary teeth; adults can have a total of 32 teeth, including 4 wisdom teeth.)
- For a superhero challenge, ask students to think about the design and location of different teeth and what different roles they play.

#### 2. Explore: Learn to Brush (and Move) like Kali

- Following the motions described in the poster, lead children through a mimed practice in proper brushing. List action words describing movements and steps of brushing on the board: top bottom, inside, outside, front, back – and the tongue!
- Split students into small groups. Challenge them to develop a dance step for each brushing action, then a dance routine using their steps. Their routine must be two minutes long, to reflect the proper amount of time to brush.
- Ask groups to perform their routines for the class. If time allows, have students peer teach by performing their routines for a younger class.

#### 3. Evaluate: Tooth Defender Training

After learning how to brush like a Tooth Defender, students are ready for their most important mission!

- Distribute the **Training for a Superhero Smile** handout, a 28-day brushing chart. (**Teacher Tip:** it takes 28 days to build a habit!)



#### Bright Smiles Alert

Brushing thoroughly with fluoride toothpaste at least twice a day is the first line of defense against plaque. Everyone can do it!



#### Superhero Training for 28 Days at Home

Have students take home their charts to track of their tooth care for 28 days. It will help remind students and their families of the Tooth Defender strategies.





# MISSION #5

Child's Name \_\_\_\_\_

## Training for a Superhero Smile

Track your tooth care at home for 28 days, and you'll be on your way to becoming a Tooth Defender!

Check off each time you brush:

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7



I flossed \_\_\_\_\_ days to help get rid of plaque!

DAY 8	DAY 9	DAY 10	DAY 11	DAY 12	DAY 13	DAY 14



I ate more healthy snacks, and fewer sweet and sticky snacks to help prevent plaque attacks!

DAY 15	DAY 16	DAY 17	DAY 18	DAY 19	DAY 20	DAY 21



I have a dental appointment on \_\_\_\_\_ (date)

DAY 22	DAY 23	DAY 24	DAY 25	DAY 26	DAY 27	DAY 28

### Key Messages for "Practicing Your Powers"

1. Plaque is bacteria. When it mixes with food, it creates an acid that can attack teeth. Brushing and flossing remove plaque!
2. Brushing with fluoride toothpaste helps strengthen teeth and fight plaque.
3. Brush all surfaces: top, bottom, inside, outside, tongue, and way in the back
4. Flossing gets the plaque that brushing may have missed.
5. Never share your toothbrush. Replace it every 3 months or when it becomes shaggy.

# LESSON #6 Meet a Tooth Defender: Spotlight on Dr. Rabbit

## Lesson at a Glance

Students read **Tooth Defenders: How It All Began** storybook to learn about the important role of dentists in protecting our teeth. They also discover how a tooth defender can unlock Bright Smiles Super Powers and learn about the origins of Placulus. Then, students write themselves into the story and have the opportunity to speak with a real-life Tooth Defender.

## Prepare the Lesson

- **Tooth Defenders: How It All Began** storybook
- Paper, crayons or colored pencils
- ▶ Schedule a class visit to a dental office, or arrange for a local dental professional to visit the class

**Time Required: 30 minutes x 2**

**Ready for Action!**

### 1. Engage: Learning to be a Superhero

- Begin by discussing superheroes in general. Invite each student to think about his/her superhero quality, something he/she does to help others. What strengths and positive qualities do they feel they have?
- Ask the following questions:
  - What is your best quality? What are your strengths?
  - How did you acquire your superhero quality? How do you maintain it?
  - Did someone teach you? Did you learn it yourself? Was it difficult?

### 2. Explore: Tooth Defenders: How It All Began

- Revisit the topic of “oral health superheroes” (Tooth Defenders). Share this “secret” with your students: The TAooth Defenders were not born with their powers. They acquired them through effort and the help of mentors!
- Read **Tooth Defenders: How It All Began** storybook out loud to students to see how Paige, Finn, Kali, and Miguel became defenders. Ask: What did students notice in the dental office scene? What powers are seen in the book? What could young Plackie have done differently in order to have finished Tooth Defender training?
- Have the students practice the **Tooth Defender’s Pledge** from the book.



### Bright Smiles Alert

Dentists and dental hygienists are your key partners in oral health. They help keep your smile bright and show you how to keep teeth and gums healthy.



### Local Oral Health Superheroes

With the help of parents, compile a list of names of local dental professionals to share with the rest of the school community. Challenge students to become their family’s Tooth Defender superhero, and share what they’ve learned at home!



## 6. Explain: Chronicle a Tooth Defender

- Tell students that Pearl E. White, Tooth City news reporter and local celebrity, is looking for a nightly news co-anchor, and that they will audition for the role! She wants to do a story on the life of a Tooth Defender.
- Have students work in pairs to choose a Tooth Defender and compose a brief report sharing the Defender's life story. Explain that they will then "audition" to deliver the report as co-anchor, to Tooth City residents (i.e. the rest of the class). Just like real news reporters, remind students to:
  - Include key information (who, what, where, when, why and how)
  - Use important oral health vocabulary (fluoride toothpaste, toothbrush, plaque, floss, fluoride rinse)
  - Speak clearly
- Ask students to first write a draft, and then practice before delivering their reports orally to the rest of class. Remind them to share their bright smiles!

## 7. Elaborate: Getting to Know the Real Dr. Rabbit

- Invite a local dental professional to visit. (Optionally, have the class visit a dental office.)
- Prepare students by starting a class **K-W-L** chart prior to the visit. What do they know? ("K")
- Brainstorm with your students about what more they would like to discover about dentists. ("W") Ask students to create interview questions they can ask a dentist.
- Have students ask their pre-written interview questions during the visit.
- After the visit or presentation, ask students to reflect on what they learned and fill in the "L" of their **K-W-L** chart.



What we already **KNOW** about dental professionals



What we **WOULD LIKE TO KNOW** about dental professionals



After the visit, what we **LEARNED** about dental professionals



## Tooth Defenders' Anthem

Ran to the mirror 'bout a quarter to three  
Had to see what was there, where my smile oughta be  
Opened my lips – what did I see?  
Two rows of pearly beauties, what a lucky me!

My Teeth – I love 'em — yeah that's what I said  
Teeth – the brightest thing in my head  
My teeth – and if I want to keep 'em that way  
I gotta brush those babies at least twice a day

My teeth – you gotta admit they're awesome  
Teeth – to keep 'em that way I floss 'em  
Teeth – gonna floss 'em every day  
They're shiny and they're bright and I'd like 'em to stay.

Give good oral health a whirl  
And you'll never be too shy to give your lip a curl  
When you smile everyone stops to stare  
Cuz they see you're makin' visits to the dentist's chair

My teeth – The brightest things you've ever seen  
Teeth – Shining 'cause they're sparkling clean  
My teeth – you gotta limit those sticky snacks  
If you wanna stay away from the plaque attacks  
Give good oral health a try  
And you'll dazzle them all with a brilliant smile  
And a secret you should know  
Healthy teeth 'n gums help keep you healthy...  
from tooth to toe.

My teeth – the brightest things you've ever seen  
Teeth – Shining 'cause they're sparkling clean  
My teeth – I brush 'em every day  
They're shiny and they're bright and I'd like 'em to stay!

# LESSON #7

## Bright Smiles, Bright Futures: Today and Forever!

### Lesson at a Glance

Students produce and receive an original certificate highlighting the Tooth Defender strategies. They extend their learning by planning creative ways to share oral health practices with their friends and family.

### Prepare the Lesson

- Paper, crayons, colored pencils, paints, other art materials for decorating
- ▶ Display the **Tooth Defenders' Poster** (side #2)
- ▶ Make a copy of the **Bright Smiles Tooth Defender Certificate** handout for each student

 **Time Required: 30 minutes**

**Ready for  
Action!**

#### 1. Engage: Bright Smile Moments

- Invite students to share their favorite or most memorable “Bright Smile Moment” from their Tooth Defender Training.

#### 2. Explore: Tooth Defender Certificate

Just like the Tooth Defender Superheroes, your students will receive a certificate/pledge to complete their training.

- Distribute the **Bright Smiles Tooth Defender Certificate** handout. Each student will decorate one but should leave the name blank.
- Have students list, illustrate, and decorate with the strategies and knowledge the class has learned.
  - Display the **Bright Smiles Poster, Tooth Defender Challenge: Discover Your Bright Smiles Super Powers** (side #2) as a reference.
  - Have students follow the tangled paths that connect the Defenders to their Super Powers. How will students maintain their powers moving forward?
- Remind students to leave the name section of the certificate blank. When the certificates are completed, fill in the names so that each student receives a certificate made by a classmate.

#### 3. Explain: Act like a Tooth Defender

- Divide the class into teams, and challenge them to brainstorm creative ways of sharing the oral health messages they have learned. Examples could be a puppet show, mural, a play, posters, original books, etc.
- Have teams prepare to share their projects at Tooth Defenders Graduation!

#### 4. Elaborate: Tooth Defenders Graduation

Invite family members, friends, and other students to celebrate oral health.

- Encourage students to show off their work on the **Bright Smiles** bulletin board.
- Have teams share the projects they have developed.
- Award the certificates in a Bright Smiles Graduation ceremony, and have students recite the Tooth Defender’s Pledge together!



#### Bright Smiles Alert

Your bright smile can last a lifetime if you take care of it. Use your own Bright Smiles Super Powers to be a lifelong Tooth Defender!



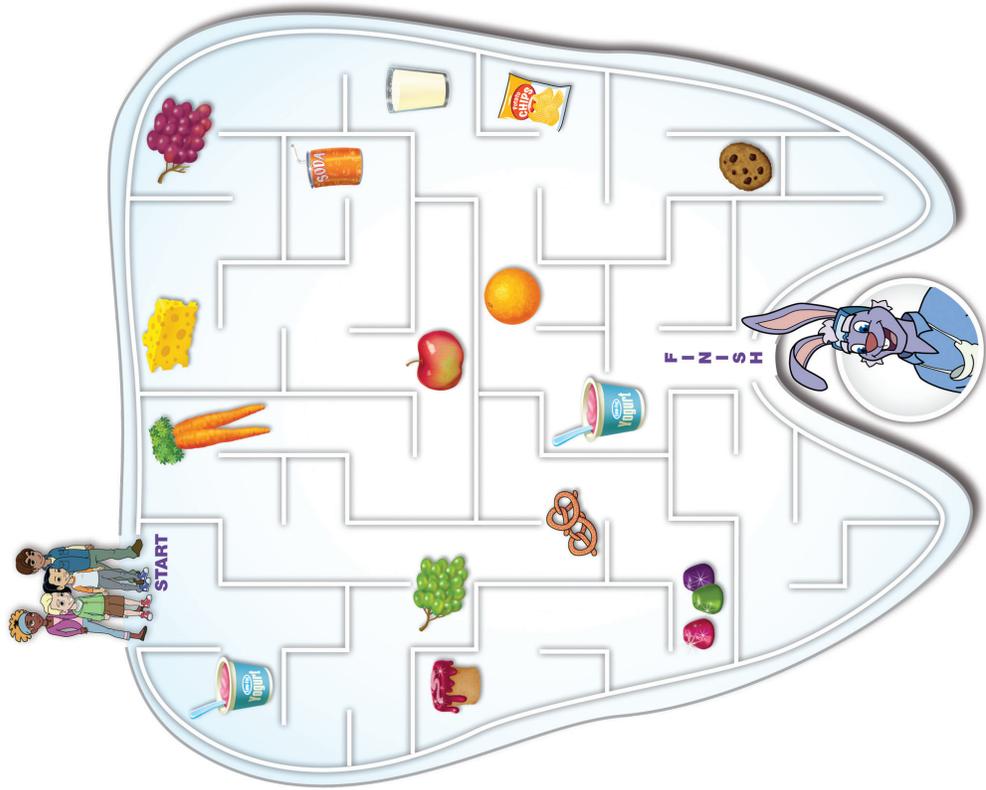
#### Tooth Defenders at Home

Invite families to come celebrate the Tooth Defenders Graduation. Ask for their support in continuing the quest for Oral Health at home by distributing handouts (see page 21 for ideas!).



# Tooth Defenders Maze

Help Kali, Finn, Paige, and Miguel find their way to Dr. Rabbit! Use colored dots to mark the path. You'll travel through healthy food choices to get there... but watch out for the sugary "dead ends"!

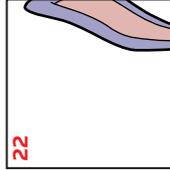
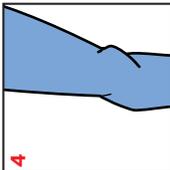
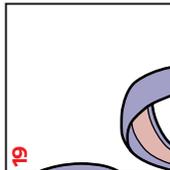
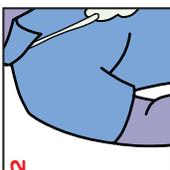
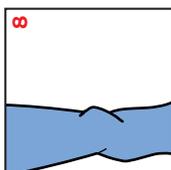
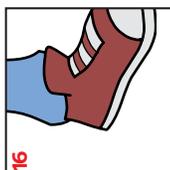


# Dr. Rabbit's Math Puzzle

1. Crack the code! Solve the math problems to get the key that will help you solve Dr. Rabbit's puzzle.
2. Cut out the squares of Dr. Rabbit and use the code answers in sequence to put him back together!

$\begin{array}{r} 11 \\ + 11 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ + 10 \\ \hline \end{array}$	$\begin{array}{r} 17 \\ - 15 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 8 \\ \hline \end{array}$
$\begin{array}{r} 15 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ - 8 \\ \hline \end{array}$	$\begin{array}{r} 24 \\ - 12 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$	$\begin{array}{r} 19 \\ - 11 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$

 5	 13	 14	 22
 4	 12	 25	 19
 2	 10	 8	 16

# Fostering Family Involvement

Good oral health is an integral part of a child's overall health.

Remind parents and caregivers that by modeling proper tooth brushing and encouraging children to take care of their teeth at home, they are helping their child develop healthy habits they can practice forever!



Bright Smiles, Bright Futures is most successful when educators, dental professionals and families work together to promote positive and lasting oral health habits starting at a young age.

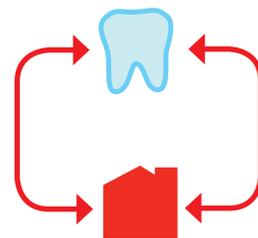
Parents play a key role in their child's oral health. As you take your students on the journey toward becoming tooth defenders, you are in an ideal position to foster at-home involvement for your students and their families!

The Colgate Bright Smiles, Bright Futures integrated program gives you the information, materials and ideas to foster family involvement and extend the lessons you're covering in class.

- Utilize the **Home Connections** tips sprinkled throughout this guide. They offer easy ideas for sending oral health messages home and promoting family engagement.
- The **Family Take-home** gives parents the oral health nuts-and-bolts they need to easily integrate oral health strategies into their daily family routines. Distribute the take-home as a program kickoff, at an in-class event, or to wrap up the unit.
- The **28-Day Oral Health Tracking Chart** is a great at-home reminder that defending teeth is something to be done every day. Have additional copies available for those families who want to continue tracking beyond the 4-week period.

Remind parents that if a child has a dental checkup scheduled during the tracking period, the child can take it along to the dental appointment to share – perhaps the dental professional can even autograph the chart!

- The **Tooth Defenders' Pledge/Certificate** starts as an in-class activity ... and concludes with a meaningful reminder that children will be proud to take home and share! Encourage parents to post it at home as a reminder of the importance of good oral health habits for everyone!
- Encourage parents to join Bright Smiles, Bright Futures on Facebook!  
[www.facebook.com/colgate](http://www.facebook.com/colgate)



Remember: you are ensuring that children's smiles can last a lifetime!

# Tooth Defender Training At-A-Glance

PAGES	LESSON COMPONENTS	TOOTH DEFENDERS' LEARNING OBJECTIVES	GRADE 2-3 GLOBAL EDUCATION STANDARDS
4-5	<p><b>1: Tooth Defender Training Starts with a Smile!</b></p> <p><b>SH: Sharing Bright Smiles</b></p> <p><b>SH= Student Handout</b></p>	<ul style="list-style-type: none"> <li>• Share existing knowledge of oral health</li> <li>• Explore the connections between oral health and well-being</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Choose appropriate words to express and describe ideas while speaking and writing</li> <li>• Ask and answer questions to explore a topic and gather more information on a topic</li> </ul> <p><b>Visual Art</b></p> <ul style="list-style-type: none"> <li>• Use diverse materials, in combination with writing, to express ideas visually and creatively</li> </ul>
6-9	<p><b>2: Dr. Rabbit and the Tooth Defenders</b></p> <ul style="list-style-type: none"> <li>• <b>Video: Dr. Rabbit and the Tooth Defenders</b></li> <li>• <b>Video Scene-by-Scene Guide (See page 7)</b></li> </ul> <p><b>SH: Tooth City Scavenger Hunt</b></p>	<ul style="list-style-type: none"> <li>• Define and utilize new (and key) oral health vocabulary: toothpaste, toothbrush, floss, fluoride rinse, plaque</li> <li>• Identify and describe oral health strategies</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Acquire, define and use new and varied vocabulary correctly while speaking and writing</li> <li>• Determine main ideas and describe supporting details of information presented in diverse media, visually and orally</li> <li>• Ask and answer questions to explore a topic, gather more information to demonstrate understanding of an idea, event, or concept</li> <li>• Report on a story with appropriate facts and relevant descriptive details</li> </ul>
10-11	<p><b>3: YOU too, can be a Tooth Defender!</b></p> <p><b>SH: Bright Smiles Supply Kit</b></p>	<ul style="list-style-type: none"> <li>• Explain the connection between healthy behaviors and being a superhero</li> <li>• Demonstrate an understanding of how to use oral health tools</li> <li>• Creatively identify and summarize oral health practices</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Describe characters in a story and explain how their actions contribute to the sequence of events</li> <li>• Tell and dramatically express a story with descriptive details speaking clearly at an understandable pace, using dialogue to express the thoughts, feelings and responses of characters</li> <li>• Participate in collaborative conversations with diverse partners</li> </ul> <p><b>Visual Art</b></p> <ul style="list-style-type: none"> <li>• Use diverse materials, in combination with writing, to express ideas visually and creatively</li> </ul>
12-14	<p><b>4: Know the Enemy: The Science of Placulus</b></p> <p><b>SH: Placulus, The Villian of Tooth City</b></p>	<ul style="list-style-type: none"> <li>• Understand and explain what causes tooth decay</li> <li>• Use scientific discovery to draw conclusions based on observation and analysis</li> <li>• Make dietary choices that keep teeth healthy</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Describe characters in a story and explain how their actions contribute to the sequence of events</li> <li>• Tell and dramatically express a story with descriptive details speaking clearly at an understandable pace, using dialogue to express the thoughts, feelings and responses of characters</li> </ul> <p><b>Science</b></p> <ul style="list-style-type: none"> <li>• Demonstrate ability and understanding of how and why to conduct scientific inquiry; carry out investigations in collaboration with other students</li> <li>• Understand and describe the change of properties in matter</li> </ul> <p><b>Math</b></p> <ul style="list-style-type: none"> <li>• Generate and represent data by measuring lengths of an object using appropriate tools; compare and interpret two sets of data</li> </ul>

PAGES	LESSON COMPONENTS	TOOTH DEFENDERS' LEARNING OBJECTIVES	GRADE 2-3 GLOBAL EDUCATION STANDARDS
15-16	<p><b>5: Practice Your Powers: Brush Like A Tooth Defender</b></p> <ul style="list-style-type: none"> <li>• <b>Poster: Tooth Defenders</b></li> </ul> <p><b>SH: Training for a Superhero Smile</b></p>	<ul style="list-style-type: none"> <li>• Practice proper brushing and flossing to get rid of plaque and keep teeth healthy</li> <li>• Practice oral health care by tracking brushing for 28 days</li> <li>• Share oral health strategies with families</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Engage effectively in collaborative discussions with diverse partners, building on others' ideas and expressing their own clearly</li> <li>• Write routinely over extended time frames for discipline-specific tasks and purpose</li> </ul> <p><b>Math</b></p> <ul style="list-style-type: none"> <li>• Use place value understanding and properties of operations to add and subtract</li> <li>• Generate measurement – tell and write time rounding to the nearest five minutes using a.m. and p.m.</li> <li>• Conduct basic mathematical calculations of addition and subtraction</li> </ul> <p><b>Physical Education</b></p> <ul style="list-style-type: none"> <li>• Apply movement concepts to learning and development</li> </ul>
17-18	<p><b>6: Meet a Tooth Defender: Spotlight on Dr. Rabbit</b></p> <ul style="list-style-type: none"> <li>• <b>Storybook: Tooth Defenders: How It All Began</b></li> </ul>	<ul style="list-style-type: none"> <li>• Explain how dental professionals help us to care for our teeth</li> <li>• Synthesize oral health practices by creating an original story</li> <li>• Practice daily tooth care with the whole family by completing an oral health tracking chart</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Determine, describe and explain main ideas and concepts presented orally or through other media</li> <li>• Report on a story with appropriate facts and relevant descriptive details</li> <li>• Write narrative text to express real or imagined experiences or events using appropriate vocabulary, descriptive details, and clear event sequences</li> <li>• Speak audibly and express thoughts, feelings, and ideas clearly</li> </ul> <p><b>Visual Art</b></p> <ul style="list-style-type: none"> <li>• Use diverse materials to express ideas visually and creatively</li> </ul>
19 and 24	<p><b>7: Bright Smiles, Bright Futures: Today and Forever!</b></p> <ul style="list-style-type: none"> <li>• <b>Poster: Tooth Defenders</b></li> </ul> <p><b>SH: Tooth Defender Certificate</b></p>	<ul style="list-style-type: none"> <li>• Summarize key oral health strategies from the Bright Smiles, Bright Futures program</li> <li>• Communicate knowledge and learnings in a variety of ways</li> <li>• Develop a project to teach others about oral health practices</li> </ul>	<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• Engage effectively in collaborative discussions with diverse partners, responding to questions, and expressing ideas, feelings and thoughts clearly</li> <li>• Present and communicate information, findings, and supporting evidence following a line of reasoning, and utilizing organization, development, and style that are appropriate to task, purpose, and audience</li> <li>• Speak audibly and express thoughts, feelings, and ideas clearly</li> </ul> <p><b>Visual Art</b></p> <ul style="list-style-type: none"> <li>• Use diverse materials, in combination with writing, to express ideas visually and creatively</li> </ul>

**JUST FOR FUN**  
Page 20

**Bonus Puzzles!**

- Dr. Rabbit's Math Puzzle
- Tooth Defenders Maze



# Tooth Defender Certificate

This is to certify that

\_\_\_\_\_ (Name of Tooth Defender)  
has joined the ranks of Tooth Defender Superheroes.

## Tooth Defenders' Pledge:

I'll give good oral health a try,  
And dazzle the world with my brilliant smile.  
So here's the secret I now know:  
Healthy teeth help keep me healthy...  
from tooth to toe!

\_\_\_\_\_ Date

\_\_\_\_\_ Superhero Trainer/Teacher

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**Directions:** Decorate the certificate using words and pictures of the Tooth Defender supplies and strategies that your class has mastered, and then decorate the certificate. Leave the name section blank for your teacher to complete.

