Dear third-grade educator:

HELP DEFEAT MONSTER MOUTH!

The Pennsylvania Dental Association (PDA) is pleased to provide you with the 2015 National Children’s Dental Health Month (NCDHM) lesson plan. Teaching this lesson during NCDHM in February could help you earn the following:

- $500, $250 or $100 for one of your students
- $250 for your school
- $250 for you

Pages 2, 3 and 4 contain a lesson plan for you to teach this February. On our website, you will find activity sheets to download that promote the importance of good oral health. To conclude the lesson, students can participate in the PDA-sponsored poster contest. Contest rules are located at www.padental.org/postercontest.

Please select only one classroom winner and submit the winning entry to:

Pennsylvania Dental Association
Attn: NCDHM Poster Contest
3501 N. Front Street
Harrisburg, PA 17110

We must receive all entries by March 13.

Once the statewide winners are selected, the grand prize winner will receive a $500 prize, the second-place winner will receive $250 and the third-place winner will receive $100. The first, second and third-place winners and their schools will be notified at the end of March. The first-place winner will be awarded his or her grand prize at a school function to be determined by PDA and the school principal. Visit www.padental.org/ncdhm to view past winning posters.

Thank you for participating in NCDHM. We appreciate your help in promoting this important oral health lesson to your students.
**BRUSHING AND FLOSSING**

Brush teeth twice daily with a fluoride toothpaste to remove plaque from the inner, outer and chewing tooth surfaces. Bacteria lingers between teeth where your toothbrush bristles cannot reach, so it is important to floss daily. Flossing removes plaque and food particles trapped between your teeth and below your gumlines. Plaque is a sticky, colorless film of bacteria that forms on teeth. When sugar and starch from food or drinks combine with plaque, an acid is produced that attacks tooth enamel. Repeated acid attacks cause the enamel to break down and cavities to form. Poor dental hygiene, not brushing or flossing daily, results in cavities, periodontal (gum) disease and tooth loss.

**PERIODONTAL DISEASE**

If plaque is not removed, it hardens into tartar, which can only be removed by a dentist. When tartar settles along the gumline, the gums pull away from the teeth and form pockets, allowing bacteria to attack teeth roots. Warning signs of gum disease include gums that bleed easily, especially when brushed, chronic inflamed gums and sore gums. If gum disease is not treated, it could result in tooth loss.

**VISITING THE DENTIST**

Teeth should be professionally cleaned and checked once every six months. A member of the dental team can remove plaque and tartar from the gumline. X-rays taken during the oral exam uncover hidden problems and check developing teeth.

**FLUORIDE**

Fluoride is a naturally occurring mineral that strengthens tooth enamel, protecting teeth from decay. When combined with proper oral care (brushing, flossing and regular dental checkups), fluoride greatly reduces dental decay. Dentists often recommend fluoride treatments or supplements when the community’s water supply is not fluoridated.

**MOUTHGUARDS**

Mouthguards are required for high-contact sports like football, hockey and boxing. However, dentists strongly recommend them for any sport where contact or collision may occur, such as basketball, soccer and wrestling. A properly fitted mouthguard can prevent most sports-related tooth and mouth injuries and may even prevent concussions by acting like a shock absorber between upper and lower teeth.
An Oral Health Lesson for Third Graders

Primary teeth, or baby teeth, are the first set of teeth to come in. Most children have all 20 baby teeth by age three.

Permanent teeth push primary teeth out of the way, causing them to fall out. By about age 14, all primary teeth have been replaced by 28 permanent teeth. A full set of permanent teeth, 32 teeth in all, is achieved by the late teens to early 20s with the arrival of the wisdom teeth.

**PARTS OF A TOOTH**

The **crown** is the part of the tooth that you can see above the gumline. It is covered by enamel.

The **root** is located under the gumline and encases the pulp.

**INSIDE A TOOTH**

Enamel protects the inside of the tooth by acting as a barricade. Enamel is the hardest substance in the human body.

Dentin is located underneath enamel to protect the pulp and is a substance similar to bone. The majority of the tooth is comprised of dentin.

Pulp contains each tooth’s nerve endings and the blood vessels that bring nutrients to the tooth.

**TYPES OF TEETH**

**INCISORS**

Incisors are shaped like tiny chisels that are used for cutting and chopping food. Your front four teeth on the top and bottom of your mouth are incisors.

**CANINES**

The pointy shaped teeth next to your incisors are canines. You have two canines on top and two on the bottom and use them to tear food.

**PREMOLARS**

When all the permanent teeth have come in, four premolars are found next to each canine. Premolars are bigger and stronger than canines and incisors. They have ridges that are used to crush and grind food.

**MOLAR**

The last type of tooth is the molar. The 12 molars (six on the top jaw and six on the bottom jaw) are very wide with several ridges to grind up food so it can be swallowed.
DISCUSSION POINTS
Sugar in soda combines with bacteria in our mouths to form acid.
- Acid attacks teeth for about 20 minutes each time we eat or drink sugary foods.
- Ongoing acid attacks weaken the enamel on our teeth which causes cavities.
- Kids and teenagers are more susceptible to decay because their tooth enamel is not fully developed.
- Soda and soft drinks have no nutritional value and are often called “liquid candy.”
- Drink milk, water or 100 percent fruit juice to avoid the harmful effects of “liquid candy” on your teeth.

Hands-On Science Project
SUGAR SURPRISE
You will need:
- 5 lb. bag of white sugar
- 20 oz. bottle of orange soda
- 20 oz. bottle of cola soda
- 20 oz. bottle of lemon lime soda
- A teaspoon
- 3 glass measuring bowls or cups

Directions:
Help students figure out how much sugar is in each beverage by reading the nutrition facts panel on each bottle. Divide the total number of carbohydrates per soda by 4 to get the number of teaspoons per bottle.

Or, use this cheat sheet:
- Orange soda has 20 teaspoons of sugar per 20 oz. bottle.
- Cola has 16 teaspoons of sugar per 20 oz. bottle.
- Lemon lime soda has 15.5 teaspoons of sugar per 20 oz. bottle.

Place one bowl or cup beside each bottle of soda. Using your measuring tools, place the equivalent amount of sugar in each bowl.

I KNOW MY MOUTH ACTIVITY
Label sheets of construction paper as follows. Four sheets as incisors, two sheets as canines and four sheets as molars. Randomly distribute the sheets of labeled paper to 10 students. Allow the students to work as a team to organize themselves in the correct order of the teeth in their mouth. The correct order: molar, molar, canine, incisor, incisor, incisor, incisor, canine, molar, molar. Ask other students in the classroom to describe the shape and function of each type of tooth.

LOOK WHO’S SMILING!
Classroom Bulletin Board
Take a photograph of each child smiling. Post the photos on a bulletin board. Allow each child to write one or two sentences on a sheet of construction paper about what they do to keep their teeth healthy. For example: I keep my teeth healthy by eating nutritious foods, or I keep my teeth healthy by rinsing with mouthwash. Post the sentences below each child’s photo.