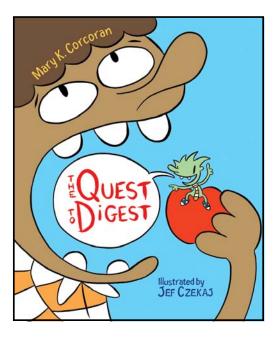
# THE QUEST TO DIGEST ACTIVITY GUIDE



### IT'S IN THE BAG!

(Grades 3-5)

Give students a real "taste" for physical digestion.

- 1. Place a piece of bread in a sealable plastic bag. This signifies a piece of food in the mouth or stomach.
- 2. Add several spoonfuls of water into the bag and seal it.
- 3. Digest the food in the bag by mashing up the bread and water with your hands as the teeth do in the mouth and as the stomach does when it churns food.
- 4. To describe what happens in the mouth, go to page 11 for information about bolus.
- 5. To describe the work of the stomach, turn to page 18 to read about chyme.

(Grades 3-5)

### TAKE A BITE OUT OF THIS!

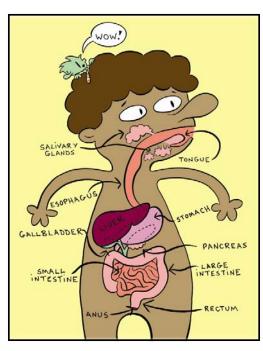
Connect art with science!

Ask students to pick a partner and examine each other's teeth. Have them draw and describe the different types of teeth they see. Use page 8 of *The Quest to Digest* to identify the three types of teeth they observed. Then using their drawings and descriptions, students can make clay models of the three types of teeth.

### **HOW LONG?** (Grades 3-5)

Investigate the length of the small and large intestines.

- 1. Holding up a 12-inch ruler, ask students to guess how many of these rulers shows the length of the small intestine. Find the answers on pages 20 and 24.
- 2. Have twenty students line up in the classroom, holding up their one-foot rulers. The remaining students can walk the length of the 20 rulers. Ask students what they think about having something working inside of them that is this long!
- 3. Ask students to figure out how much longer their small intestine is compared to their height.
- 4. Discuss why the longer small intestine is given its name and why the shorter large intestine has its name.



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(PAGE 2)

### WHAT A STORY!!

(Grades 4-7)

Connect creative writing with science!

After students read *The Quest to Digest*, ask them to write a story or poem about how it would be if they were miniaturized and sent through the digestive system of their best friend. If you like, you can have students share their stories.

### **TRIVIA**

(Grades 6-7)

Use these trivia questions to spark class discussion.

1. What is the length of a human tapeworm? ANSWER: 15 or 20 feet



2. Why is the small intestine a "perfect" home for a human tapeworm? How does it fill its role as a parasite?

ANSWER: By the time food is digested in the small intestine, it is small enough for the body to send it to cells for cellular respiration. But, food is also small enough to be used by a parasitic tapeworm that has no digestive system of its own. See page 22 in *The Quest to Digest* for more information.

3. What does the human body need besides food in order for cellular respiration to occur?

ANSWER: The body needs food, oxygen, and water for cellular respiration to occur. See page 23 in *The Quest to Digest* for more information.

- 4. If a hawk eats a rattlesnake, why doesn't it die from the venom?

  ANSWER: Venom is a protein; as a hawk digests a rattlesnake, it digests its venom.
- 5. What is colon cancer?

  ANSWER: This is cancer that occurs in the parts of the large intestine.

#### **WEBSITES**

For more information about digestion, check out these websites: Human Anatomy Online (<u>www.innerbody.com/htm/body.html</u>) KidsHealth (www.kidshealth.org/kid)

Enchanted Learning (www.enchantedlearning.com/subjects/anatomy/digestive/index.shtml)

