# **i3 STC Kit Extension Activities**

# **North Carolina**

Grade: 4<sup>th</sup> grade

#### Kit Name:

#### Food and Body Energy (Science Unit development) 4.L.2.

Essential Standard(s): (List number, standard, clarifying objectives where appropriate)

- 4.L.2 Understand food and the benefits of vitamins, minerals and exercise
- 4.L.2.1 Classify substances as food or non-food items based on their ability to provide energy and materials for survival, growth and repair of the body.
- 4.L.2.2 Explain the role of vitamins, minerals and exercise in maintaining a healthy body

Unpack the Standard (What does it mean?? What is the "Big Idea"?):

- 1. How do living things get energy from food?
- 2. How does food provide energy?
- 3. What makes a food nutritious?
- 4. How does an animal's body make use of the foods they eat?
- 5. Why is being healthy important for students your age?
- 6. What can you do to keep yourself healthy?
- 7. How do you think nutrition and exercise play a role in keeping your body healthy?
- 8. Why is it important to eat foods from all Five Food Groups each day?
- 19. What nonfiction text features should you pay attention to when reading informational text?

What is the Engaging (will get the student interesting) Essential Question that the students will be trying to answer as a result of this Extension?

How do nutrients like food and vitamins, along with exercise affect my body?

Which activities in the kit touch on the Standard(s) and how can they be adjusted to better address the Standard(s)? Kit not available

#### **Kit Activity**

# **Student-friendly statements focus and objectives:**

(I can... or I will... statements)

- 1. I can classify food vs. non-food items based on their ability to provide energy for survival.
- 2. I can classify foods into groups based on the nutrients and health benefits they provide.
- 3. I can identify how plants produce their own food for survival.
- 4. I can identify how animals meet their energy needs for survival.
- 5. I can discuss the importance of exercise for the human body.
- 6. I can describe how a healthy lifestyle contributes to

#### **Extension Suggestions**

#### **Activating Prior Knowledge**

(What do students need to know for success and understanding?)

1. Have students brainstorm a list of healthy foods and unhealthy foods in a cooperative group on chart paper. Hang chart paper around room to facilitate discussion.

### <u>OR</u>

Have students participate in a Gallery Walk to share what they already know about the essential questions. Have 4 chart papers hanging throughout the room. The following headings could be used: "Nutritious Foods," "Types of Exercise," "How Plants Get Their growth, development, and maintenance of the human body and its systems.

- 7. I can identify the main idea of informational and literary text.
- 8. I will produce a menu to demonstrate my understanding of nutritional requirements for a healthy lifestyle.
- 9. I will make text to self connections while reading informational and literary texts.
- 10. I will put events from a text in the correct sequence.
- 11. I will demonstrate my understanding of nutrition through written journal responses and assignments. 12. I can write a persuasive essay supporting my

stance on the importance of eating a healthy breakfast.

Food," and "How Animals Get Their Food."

- 2. Ask students, "What did you have for breakfast this morning?" Record student responses. Discuss how each food item could make you feel. Explain to students that food choices can affect the way our bodies operate. Ask, "Why is it important to choose the right foods?"
- 3. Ask students, "What should you eat before a big test or a big game? Why is food choice important?"
- 4. Show students a plant and ask them to share ideas about how that plant "eats." What does it need? How do they know this?

### **EXTENSION ACTVITIES**

- Factual research to learn the effects of food and non-food substances on health of organisms.
- Interactive activities to highlight the effects of exercise on the body (monitoring heart rate, breathing, reaction time, etc.). http://www.nourishinteractive.com/
- 3. Opinion/argumentative writing- find, read and *critique* opinion/argumentative stories and articles in which the author offers details to support a perspective.
- **4.** Explore nutritious meal combinations
- **5.** Evaluate school lunch menus based on nutrition

#### **Remediation and Acceleration**

(How might you provide acceleration or provide extra support for struggling learners and opportunities to accelerate your advanced learners?

## Remediation:

- 1. Teacher will work with students in small groups to reread selections to help reinforce the ideas they have learned.
- 2. The students will also use graphic organizers, visuals, and hands on activities to help them review the concepts they have learned. Acceleration:
- 1. Students will choose a topic of interest related to nutrition to further explore and discover how it connects with their own life. Students will share what they have learned by creating one of the following, PowerPoint,

poster, poem, song, game, etc. 2. Students will create a narrative story about a child who eats an unhealthy lunch. The following story starter can be provided: "I watched as my friend \_\_\_\_\_ unpacked her lunch. Wow had she made some unhealthy choices to include!" Students will complete the story. You will need to encourage them to include ideas about the value of nutrition and the effects on the body. Resources: WRITING: Gregory the Terrible Eater, Sharmat 1. Throughout the unit, the students will keep a Nutrition Journal to respond to journal entries The Magic Schoolbus Inside the Human Body, Cole and share their thoughts about what they are learning. Nutrition, Food and Fitness, West 2. Students will write a persuasive paragraph to support their position on eating a healthy diet/not eating a healthy diet. Nutrition http://kidshealth.org/kid/games/mission nutrition.html Persuasive Paragraph Rubric. 3. Students will research a key nutrient or http://www.nourishinteractive.com/ mineral and prepare a mini-poster to share with http://www.letsmove.gov/eat-healthy the class. 4. At the end of the unit, the students will create a http://www.readwritethink.org/ healthy menu for the day that meets the nutrition requirements. They will also include an explanation http://scnces.ncdpi.wikispaces.net/2004+SCOS+Resources+Kof how their menu meets the requirements.

Additional Suggestions (Literature connections; online resources):

Language Arts

Demonstrate independence

Respond to varying demands of audience, task, purpose and discipline

Comprehend as well as critique

Value evidence

Come to understand other perspectives

-Chocolate Fever

by Robert Kimmel Smith

Lexile: 680

-The Boy Who Wanted to Cook

by Gloria Whelan

-Fairy Tale Feasts: A Literary Cookbook for Young Readers and Eaters

by Jane Yolen

Cloudy with a Chance of Meatballs

by Judi Barrett

Lexile 730

-Gregory, The Terrible Eater

by Mitchell Shermat

Lexile 490

-What Food Is This?

by Rosemarie Hausherr

Lexile: 790

Good Enough to Eat by Lizzie Rockwell

Lexile: 570

-<u>Arianna's Nutrition Expedition</u> (Includes Lessons and stories to introduced nutrition concepts)

http://school.fueluptoplay60.com/tools/nutrition-education/lessons.php

### ADDITIONAL RESOURCES (DIGITAL)

## **Resources (include digital resources)**

## **Additional Resources for Understanding Food**

- -You Are What You Eat Video
- -Nutrition Education Resources <a href="http://school.fueluptoplay60.com/tools/nutrition-education/lessons.php">http://school.fueluptoplay60.com/tools/nutrition-education/lessons.php</a>
- -Bill Nye: Nutrition Video <a href="http://www.youtube.com/watch?v=kZrdSArUgls&safe=active">http://www.youtube.com/watch?v=kZrdSArUgls&safe=active</a>
- -http://www.crickweb.co.uk/ks2science.html (Reviews a balanced plate and includes a sorting activity)
- -http://kidshealth.org/kid/stay\_healthy/food/pyramid.html#cat119 (Article that discusses the change from the food pyramid to the new food plate)
- -http://kidshealth.org (Several articles about kids staying healthy and different nutrients, vitamins, and minerals)
- -How plants grow game <a href="http://www.sciencekids.co.nz/gamesactivities/plantsgrow.html">http://www.sciencekids.co.nz/gamesactivities/plantsgrow.html</a>
- -Biology Educator Guide: The Importance of Food <a href="http://astroventure.arc.nasa.gov/teachers/pdf/">http://astroventure.arc.nasa.gov/teachers/pdf/</a> AV-Biolesson-2.pdf
- -EAT RIGHT! (Nutrition/Art Activity) <a href="http://www.eduplace.com/rdg/gen\_act/cooking/eatrigh.html">http://www.eduplace.com/rdg/gen\_act/cooking/eatrigh.html</a>
- -Jamie Oliver's Food Revolution site: <a href="http://www.jamieoliver.com/foundation/">http://www.jamieoliver.com/foundation/</a>

You could watch the video on gaggle or you tube that introduces his Food Revolution in WV and it explains the impacts of eating unhealthy and not exercising. "Jamie Oliver Food Revolution Promo"