PILOT LIGHT Anywhere

Food Education Standard #5: Food impacts health.

I Eat; Therefore, I Am: How Food Affects My Body

Grade Levels & Subjects: Grades 3 - 5 English Language Arts

Learning + Food Objectives:

Students will be able to discuss the many ways food affects the body and identify foods to add to their diet that will boost energy and health.

Common Core Standards: Common Core English Language Arts

Reading informational texts and summarizing main ideas

CCSS.ELA-LITERACY.RI.4.2

Determine the main idea of a text and explain how it is supported by key details; summarize the text.

CCSS.ELA-LITERACY.SL.4.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly



MATERIALS NEEDED

• Student Worksheet (Attached below)

CLASSROOM PROCEDURE

INTRODUCTION (5 minutes)

- 1. Ask students to a list of 6 things you do with your bodies throughout the day. Then, circle the 3 that require the most energy.
- 2. Engage in a brief discussion of their responses allowing 4 5 students to share and make note of their responses on the board or chart paper.
 - a. What were the top 3 things you circled?

PILOT ALIGHT Anywhere

- b. How do you know these things require the most energy?
- c. What do/can you do when you need more energy?
- 3. Explain that the next couple lessons will focus on the ways that food affects our bodies including how it provides the nutrients and energy we need for all our systems to function properly.

INSTRUCTION (70 - 90 minutes)

- Teachers may wish to being by to point out the parts being discussed in the texts for today and to remind them which system each body part is part of. There are several systems of the Human Body, but today's activities will focus on parts of the body that fall in one of these systems. For example, the heart is a muscle (part of the muscular system). *Consider using the article, "How the Body Works for Kids" by KidsHealth from the Additional Resources list or showing the "Body Songs: Food into Energy Story Bots" by Netflix Jr.*
 - a. Circulatory
 - b. Respiratory
 - c. Excretory
 - d. Nervous
 - e. Muscular
 - f. Digestive
 - g. Skeletal
- 2. Help students access From Body to Brain: 5 ways food improves your overall health article. Point out the *Body to Brain Table* in the student worksheet that corresponds with this article.
- 3. Explain that the class will read the article aloud together with the teacher reading first and alternating with student reader until the end of the article and complete the table.
- 4. Guide students in highlighting the main idea of each of the 5 sections as they read. For instance, in the "Food Helps Repair Muscles & Build DNA" section, the main idea is "Protein helps to build and repair muscles and body organs and tissues, like skin, hair and nails."
 - a. Teachers can provide hard copies of the article so that students can highlight/annotate the main ideas of each section, which corresponds with the *Body to Brain table* in the student worksheet or students can annotate digital copies, while the teacher projects the article on screen.
- 5. Next, tell the class that they will be viewing the Healthy Foods for my Body video which is a book being read aloud on video. This video will help them to fill out the *Body/Food Chart Activity Part 1*. After watching the video, ask if students need to view it a second time to fill in what they missed.
 - a. Tell students that although they will be referencing some children's books & videos, the content of the video is essential to understanding how food affects the body.
 - b. As an alternative to the table, teachers may wish to have students draw the human body on big chart paper or have pre-printed outlines available for student use during the lesson.
- Direct students' attention to the *Body/Food Chart Activity Part 2* section of the worksheet. Explain that now they're going to focus on the parts of our body that we don't see. Consider using the "Body Basics Library for Teens" by KidsHealth article.
 - c. Bones protect the organs of the body.
 - d. Muscles pull on the joints, allowing us to move.
 - e. Joints are where two bones meet., make the skeleton flexible and make movement possible.

PILOT ALIGHT Anywhere

I Eat; Therefore, I Am: How Food Affects My Body

- 6. Explain that students will first read an article with their groups and begin on part 2. Then, after watching a video, they finish part 2 to gain a better understanding of what's going on inside the body and how foods help our internal body parts, as well as our external body parts.
- 7. Help students access the "Food As Medicine" article go to the "Foods with powerful medicinal properties" section. Tell students that this article mainly talks about the heart (a muscle), brain (a muscle) and systems of the body, but this section identifies which foods help the body function and how they help.
 - a. The teacher should demonstrate the location of these parts by pointing them out on their body.
 For example, the teacher shows a joint by bending their arm at the elbow, showing their knee or use visuals/diagrams to show these parts: Bones, Muscles, Joints
 - b. Model for them how to get to the "Foods with powerful medicinal properties" section of the article (Click "Medicinal Foods" at the top of the article) if you're using a digital version.
- 8. Read this section aloud, pointing out references to the bones, muscles, or joints. Direct students to copy or write down the foods named for each body part in the *Body/Food Chart Activity Part 2 table*.
 - a. Teachers may want to do this digitally highlighting or underlining the passages on screen so that students know which words/phrases to copy.
 - i. If time permits, cue up "Choose Good Food" video book as a visual source for the Part 2 activity. Tell students that this video book has three chapters: 1- "*Picky Eaters", 2- "5 Food Groups"* and "3-*Energy Lunch".*
 - 1. *Picky Eaters* discusses the main character's eating habits and what foods are good for certain parts of the body
 - 2. *5 Food Groups* lists and describes the 5 food groups
 - 3. *Energy Lunch* provides tips on how to choose healthy foods and includes a glossary of the
- Instruct students to get into groups of 4-5 and ask them to look at the "1939 Food Chart: Choose Something to Eat from Each Group Every Day" and "Food Rx: Healthy Energy Boosting Foods." Teachers can either have printed copies, project it on screen or give students digital access to both images.
- 10. As a group, they should review both images and discuss what they see using these prompts:
 - a. Do you notice any foods on either of these charts that were referenced in the videos?
 - b. (Based on the 1939 chart) Do you think that eating 1 item from each group listed on this poster is still a good choice for our bodies today? Why or why not?
 - c. (Based on both images) How have food recommendations changed since 1939?

CLOSING (10 minutes, teacher discretion)

- 1. Instruct students to reflect on their learning by completing the Exit Ticket section of the student worksheet:
 - a. Two foods I'm willing to add to my diet over the next 2 weeks to boost my strength and energy are...
 - b. I chose these two foods because they are good for _____ [or use this prompt: I chose these two foods because they will help my body _____]
 - c. One person that can help me with this goal is _____
- Collect the student worksheets at the end of class or allow student additional time to complete it if necessary.

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ADDITIONAL RESOURCES

- Interactive to Explore the Body Systems:
 - o "Explore the Body" by KidsHealth https://kidshealth.org/en/kids/center/htbw-main-page.html
- Library of Resources about the Body:
 - o "Body" by KidsHealth https://kidshealth.org/en/teens/your-body/

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RECIPE FROM VIDEO

Below is the recipe from the video in this lesson. Pilot Light Anywhere lessons are designed to be able to be delivered from a remote setting; however, this recipe can be demoed by the teacher virtually/in person, sent home to families, or used for reference.

Energy Balls

Makes (20) 1-inch energy balls

Ingredients:

- 1 cup oats
- 1/2 cup nut or seed butter
- 1/2 cup chopped dark chocolate
- $\frac{1}{2}$ cup chopped almonds (or sunflower seeds if you want it nut-free) $\frac{1}{2}$ cup pumpkin seeds
- ¹/₃ cup honey
- ¹/₃ cup raisins
- 1/4 cup flaxseed meal
- 1 tsp chia seeds
- Pinch of salt (optional)

Materials:

- sheet pan
- parchment
- mixing bowl
- rubber spatula
- measuring cups
- spoons

Preparation:

- 3. Measure all ingredients into mixing bowl.
- 4. Mix until combined with rubber spatula
- 5. Chill for 1 hour in the refrigerator.
- 6. Remove from refrigerator and form into 1-inch balls (or larger if you prefer).
- 7. Enjoy or store for up to 2 weeks in your refrigerator.

The student worksheet below can be printed or copied onto any online learning platform.

How Food Affects My-Body-

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Bell Ringer

	Make a list of 5 things/activities you do with your bodies throughout the day. Then, circle the 3 things that require the most energy.
1.	
2.	
3.	
4.	
5.	

Main Student Texts	Additional Resources to Learn More
From Body to Brain: 5 Ways Food Improves Your Overall Health by EdX (article)	Why Should I Eat Well? by Claire Llewellyn (video book, read aloud)
<u>Choose Good Food</u> by Gina Bellasario (video book, read aloud)	A Journey Inside my Body by Bright Side (animated video)
Healthy Foods for my Body by Red Cat (video book, read aloud)	Energy-boosting for Teens & Kids Over One by KidsHealth Canada (website)
Food As Medicine by Healthline (article)	Kids Healthy Eating Plate by the Harvard School of Public Health (interactive website)
Food Rx: Healthy Energy Boosting Foods by Family Health Project (image)	How the Body Works for Kids (KidsHealth) and Body Basics Library for Teens (KidsHealth) (articles)
<u>1939 Food Chart: Choose Something to Eat from Each</u> <u>Group Every Day</u> by the USDA National Agriculture Library Archives (poster)	Body Songs: Food into Energy Story Bots by Netflix Jr (animated video)

How Food Affects My-Body-

Body to Brain Table

Text: From Body to Brain: 5 ways food improves your overall health	Directions: Write the sentence from each section that explains the <u>main idea</u> of that section. This information will be helpful for the next set of activities.
Section of the Article	The Main Idea of Each Section
1.Food gives you energy to get through the day	
2.Food helps us to repair muscle and build DNA	
3.Food can help your body insulate itself and improve your health	
4.Food can help you feel better, as well as make you appear 'more attractive'	
5.Food helps your brain	

Body/Food Chart Activity Part 1

Healthy Foods for my Body (video book)	 Step 1: Use your notes from the <i>Body to Brain Table</i> above to add foods or food groups below before watching the video. You can write or draw the foods. Step 2: Add more foods as/after you watch the <u>Healthy Foods for my Body</u> (video book). You can write or draw the foods.
Section	Answer
Teeth	
Eyes	
Brain	
Heart	
Bones	
Skin	
The Whole Body	

Body/Food Chart Activity Part 2

Texts: Food As Medicine (article) and Choose Good Food (video)	 Step 1: As your teacher reads aloud from Food As Medicine, write down foods/food groups that help each part of the body from the article. Step 2: Add more foods to the boxes after watching Choose Good Food . Step 3: If you have empty boxes, look back at your Body to Brain Table.
Bones	
Muscles	
Joints	

Comparing Food Informational Images

Directions : As a group, they should review both images and discuss what you see using these questions.				
2 foods on the charts that were also in the videos	Is it still a good idea to eat 1 item from each group listed on t1939 poster? Explain why or why not.	1 thing that's different about food recommendations now than in 1939 is		

Exit Reflection

Directions: As a group, they should review both images and discuss what you see using these questions.		
Two foods I'm willing to add to my diet over the next 2 weeks to boost my strength and energy are		
I chose these two foods because they are good for OR I chose these two foods because they will help my body		
One person that can help me with this goal is		