

PUZZLERS

#47 | FOOD WASTE



Puzzle

Create an informational pamphlet identifying various food product dating requirements and explaining their meaning in a clear and understandable way.

Standards & Connections

CCSS.ELA-LITERACY.CCRA.W.2, CCSS.ELA-LITERACY.CCRA.W.4, CCSS.ELA-LITERACY.CCRA.W.8

Background:

"In the United States, food waste is estimated at between 30-40 percent of the food supply. This figure... corresponded to approximately 133 billion pounds and \$161 billion worth of food in 2010."ⁱ A large contributor to food waste on such a large scale is the misunderstanding of food labels. "Confusion over the meaning of dates applied to food products can result in consumers discarding wholesome food. In an effort to reduce food waste, it is important that consumers understand that the dates applied to food are for quality and not for safety."ⁱⁱ

Suggested Materials:

Access to the internet



IDENTIFY

Share the background information with the students, then share the puzzle to be solved. Determine constraints (e.g., time allotted, space, materials provided, etc.) and divide students into small groups.



IMAGINE

Ask a series of questions to help students brainstorm solutions to the puzzle. Encourage students to list all ideas – don't hold back! Before moving on, make sure each group selects a solution that fits within the constraints.

Ask: How can you solve this puzzle? Which of your ideas can you build a prototype for given the constraints?



DESIGN

Students diagram the prototype, identify the materials needed to build the prototype, and write out the steps to take. Students describe the expected outcomes.

Ask: What steps will you take to create your solution? What do you expect your solution to look like and be able to do?



CREATE

Students follow their design plan and build their prototypes. Monitor their progress and remind them about how much time they have.



TEST & IMPROVE

Students evaluate their creation and compare it with the expected outcomes. Students seek areas of improvement and make changes where needed.



SHARE

Students share their solution to the puzzle and communicate lessons learned.

Ask: What was your biggest takeaway? What would you do differently?

Additional Resources:

For more background information on this topic, please visit www.purpleplow.org.



Take a trip to a local grocery store to learn about what they do with expired food. Skype with a USDA representative to discuss food dating for various products as a way to purify our runoff.

ⁱ <https://www.usda.gov/foodwaste/faqs#:~:targetText=In%20the%20United%20States%2C%20food,worth%20of%20food%20in%202010.>

ⁱⁱ <https://www.fsis.usda.gov/>

<https://www.usda.gov/media/press-releases/2019/04/09/usda-epa-and-fda-unveil-strategy-reduce-food-waste>

<https://www.foodsafety.gov/>

https://www.compostfoundation.org/Portals/1/Documents/Food_Product_Dating.pdf

<https://extension.psu.edu/label-date-marks-quality-or-food-safety>

<https://www.fda.gov/media/101389/download>