

PUZZLERS

#20 | FOOD DRIVE ACTION PLAN



Puzzle

Build an action plan for a community food drive.

Standards & Connections

NGSS.3-5-ETS1, NGSS.MS-ETS1, CCSS.ELA-LITERACY.SL.9-10.4

Background:

Forty million people struggle with hunger in the United States, including more than 12 million children.ⁱ About 795 million people in the world do not have enough food to lead a healthy, active life. That's about one in nine people on Earth.ⁱⁱ Many households that visit charitable food programs make difficult choices in order to meet basic needs. Specifically, households served by the Feeding America network report choosing between food or medical care, housing, transportation, and utilities. Food insecurity can be an extremely stressful situation for a person or household. When people don't know where their next meal will come from, their central focus becomes securing that next meal and it can be difficult to focus on other important things like school and work.ⁱⁱⁱ

Suggested Materials:

Access to the internet, paper, colored markers



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 field trip to tour around and volunteer at your local food bank.

ⁱ Feeding America. (2018). Facts about poverty and hunger in America. Retrieved from <https://www.feedingamerica.org/hunger-in-america/facts>

ⁱⁱ World Food Programme. (2015 September 30). 10 facts about hunger. Retrieved from <https://www.wfp.org/stories/10-facts-about-hunger>

ⁱⁱⁱ Feeding America. (2018). What are the connections between food insecurity and health? Retrieved from <https://hungerandhealth.feedingamerica.org/understand-food-insecurity/hunger-health-101>