

Story Problems

Companion Text: If You See the Moon, by Zia Wells

Subject Area & Grade Level: Mathematics, 5th Grade

Materials: Multiple copies of the text, scissors

Objectives

After this lesson, students will be able to:

- Extend mathematical reasoning to text in order to create story problems
- Deepen understanding of how mathematics is used in everyday life
- Evaluate quality of story problems

Activity

Read the story once through without stopping. Then, break students into groups of 3 or 4 students each and give them a copy of the text. Give each group a mathematical topic, such as probability, measurement, statistics, or other topics you may have recently studied. Have the group create the best story problem they can, based in the plot or characters from the text, and covering the topic they were given. Encourage students to be creative, and to use their story problems to highlight ways that mathematics can be used to solve real-world problems, even if it makes the problems difficult for them to answer.

Collect all story problems, and consolidate them into one document.

Reflection

Distribute the sheet of problems to all students, and have them rank the problems from best to worst. Then, have a discussion about the quality of the problems themselves. Ask the following questions in the course of the discussion:

- Are there any questions that don't make sense?
- What makes a question fair to ask students?
- How would you get the information you needed to solve the problems?
- How well do questions reflect their assigned topic areas?
- Which do you think are the best and worst questions? Why?

With students, create a list of criteria for good questions.

