

Title of Book: Counting on Frank
Author: Rob Clement
Publisher/Year: Discovery Toys Inc./1990
ISBN: 08369738

Grade Levels for Recommended Use: 3rd

TEKS:

3.4 Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:

(A) solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction;

(B) round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems;

Brief Summary: The text begins with Frank's owner receiving advice from his father to use his brain, which he promptly does. He presents a series of captivating facts, each accompanied by clear illustrations and embedded with mathematical calculations. However, it's worth noting that some of the measurements provided by Frank's owner lean towards exaggeration, as seen in his claim that ten Humpback whales could comfortably fit inside his house. This beautiful story catches readers with its colorful scenarios and offers a great learning experience in measurements and operations like addition, subtraction, multiplication, and division.

Materials needed:

- Counting on Frank by Rod Clement
- Paper and Pencil
- Counting Cubes - Multiple Colors

Suggested Activity:

1. Show students a jar filled with colored cubes. Ask them to estimate the number of total cubes and the number of each color.

2. Play the "Counting on Frank" video.
3. Pause the video frequently to ask questions and prompt discussion. Possible questions:
 - A. How did you estimate the number of cubes?
 - B. Now that you know the actual amount, how close was your estimate?
4. After the video, explain that measurement encompasses more than length, width, etc. It also includes counting items.
5. In partners, have students brainstorm an unusual object they could theoretically measure at home using math operations (addition, multiplication etc.)
6. Discuss as a class:
 - A. The difference between estimation and factual measurement
 - B. How the students would solve the math to measure their objects
7. Show a picture of a humpback whale. Ask if students have seen one before.
8. Explain how math operations could theoretically be used to measure the whale as another example of unusual measurement.

Reference:

Clements, Rod. 1990. Counting on Frank. Sydney, Australia: Collins
YouTube: https://www.youtube.com/watch?v=gUEc7Y_1RFU&t=36s

Adapted by: Lawrence Izuagie (2023)