

A Trip on the Mayflower (5.MD.1)

Summary

Students will apply their knowledge of converting ounces to pounds to a real world problem.

Main Core Tie

Mathematics Grade 5

[Strand: MEASUREMENT AND DATA \(5.MD\) Standard 5.MD.1](#)

Time Frame

1 class periods of 90 minutes each

Group Size

Small Groups

Life Skills

Thinking & Reasoning, Communication, Character, Social & Civic Responsibility, Systems Thinking

Materials

- Task Sheet
- Item List
- Student Recording Template
- Paper
- Pencils
- Graph paper

Background for Teachers

Teachers need to understand the conversion between ounces and pounds. They also need to be familiar with the journey of the Mayflower.

Student Prior Knowledge

Students need to be able to convert between ounces and pounds to complete this task.

Intended Learning Outcomes

Students will be able to select items they would need to travel on the Mayflower and add the corresponding weights to total 150 pounds. CCSS.MATH.CONTENT.5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Strategies for Diverse Learners

Supports for struggling students include:

- Practice with converting units
- Strategies for choosing items
- Strategies for combining numbers to 16
- Break the problem into groups of 50 pounds

Extensions

Additional activities include:

- Extension activities found in the lesson plan

- Use advertisements to determine the cost of the items

- Use the length of the trip to determine how the food could be rationed to last the length of the trip

Bibliography

Adapted from: Smith, Margaret Schwan, Victoria Bill, and Elizabeth K. Hughes. "Thinking Through a Lesson Protocol: Successfully Implementing High-Level Tasks." *Mathematics Teaching in the Middle School* 14 (October 2008): 132-138.

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