



Lesson 10 - Cargo Activity Practice (required)

Background

For this lesson, students practice the organization of data presented in storyline form. They will be presented with this format again in the Moon, Mars, and Beyond Mission when they must calculate the number of water bottles, amount of food, and oxygen the astronauts will need to complete the rescue of the lost astronauts.

Students use task cards to calculate how many bags of snacks and bottles of water they need to pack for a three-hour trip to the beach and for the return trip home. For the return trip home, they also need to provide snacks and food for their grandparents who return home for a visit.

Teacher Notes and Hints

Third graders sometimes get confused initially about the number of astronauts on each segment of the trip. If they take enough time to realize they will be returning with two more astronauts if they find the lost ship, the need for extra supplies becomes clear.

You may not need to use this lesson with fifth graders.

Presenting this task for practice in task card form allows the students to become more familiar with the task card format.

Skills and Objectives

Students will be able to:

- Become more familiar with the task card format.
- Calculate the amount of food and water needed for each person for a trip
- Read about a problem in word form to solve the problem
- Relate this activity to their mission work

Activity Overview

In this lesson, the student must read about a family's trip to the beach and calculate, using the information given, how much food and water is needed for each person for the trip to and from the beach.

Students can relate this activity to their mission work as they will have to calculate the food, water, oxygen, and packing crates needed for the astronauts on the rescue mission and also for the astronauts they rescue.

Key Concepts

1. Many problems involve translating a situation into number components to find a solution.
2. Problem-solving can be a step-by-step process.

Materials

- Student task cards (cut and stapled)
- Pens/pencils

Procedure

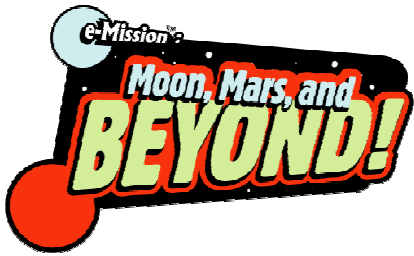
Distribute the task cards to the students and instruct them not to begin until you have previewed the lesson with them.

Preview the lesson by reading the first task card with the students. Relate this activity to their mission work. Explain to them that on Mission Day, they will be calculating the amount of food, water, oxygen and packing crates needed for the astronauts sent on the rescue and also (hopefully) for the rescued astronauts on the return trip.

Allow the students to work through the task cards, instructing them when to move on to the next card.

Check their work for understanding and accuracy.

Review any math skills with which the students may be having trouble.



Teacher Answer Key



Lesson 10/ Task Card #2

Cargo Activity Practice

Trip to the Beach

Snacks:

You will need 3 bags of snacks per person.

There are 5 people on the trip to the beach.

You will need 15 total bags of snacks for the trip to the beach.

GO TO THE NEXT TASK CARD



Cargo Activity

Trip to the Beach

Bottles of Water:

You will need 3 bottles of water per person.

There are 5 people on the trip to the beach.

You will need 15 total bottles of water for the trip to the beach.

GO TO THE NEXT TASK CARD



Cargo Activity

Trip Home from the Beach

Bags of Snacks:

You will need 3 bags of snacks per person.

There are 7 people on the trip home from the beach.

You will need 21 total bags of snacks for the trip home from the beach.

GO TO THE NEXT TASK CARD



Cargo Activity

Trip Home from the Beach

Bottles of Water:

You will need 3 bottles of water per person.

There are 7 people on the trip home from the beach.

You will need 21 total bottles of water for the trip home from the beach.

GO TO THE NEXT TASK CARD



Cargo Activity

Bottles of Water and Bags of Snacks:

Total bottles of water needed for the entire trip 36

Total bags of snacks needed for the entire trip 36