



Lesson 5 - Decoding Activity (*required*)

Background

For this required lesson, students practice decoding a message from symbols. During the mission, Transmission Specialists will receive coded messages from planet outposts. These reports will be key to determining the location of the ship over a five day period.

Students benefit from practicing the skills needed to decode the messages and are much more comfortable during mission work if they are familiar with the concept of this lesson.

Teacher Notes and Hints

- This is a fun lesson that the students should enjoy, but they should not forget the importance of decoding messages to the mission. Emphasize that they will be using this technique to get the information about the ship from transmissions that are in code.
- Discuss how many symbols are used in everyday life. Give some examples (stop sign, railroad crossing, a circle with a line diagonally across the middle) and then have them think of other examples.
- Students usually get familiar with this type of activity very quickly. You may want to have them try writing their own messages from the symbols provided.
- The students can also try adding to the list of symbols to write their own messages.

Skills and Objectives

Students will be able to:

- Become familiar with the importance of decoding messages to the Moon, Mars, and Beyond Mission
- Understand the concept of symbols representing words
- Look at symbols that stand for words and write a message from the symbols

Activity Overview

This lesson discusses the use of symbols for writing messages in code. Students become aware of the importance of decoding messages for the Moon, Mars, and Beyond Mission and become familiar with the process of decoding the messages.

Key Concepts

1. Symbols are used in everyday life to represent words.
2. Symbols are used to represent words when the message needs to be sent in code.
3. Transmissions Specialists for the Moon, Mars, and Beyond Mission will use symbols to decode messages for information about the lost ship.

Materials

- Student worksheets
- Pencils/pens

Procedure

Distribute the student worksheets for the decoded activity.

Review the procedure for decoding messages with the students.

Allow time for the students to decode the messages provided on the student worksheets.

Review the decoded statements in class to check for student understanding and accuracy.

Have the students make their own coded messages using the symbols provided.

Extensions

Students can make their own codes, keys for the codes, and messages from their codes. Suggest they use numbers, letters, and symbols for their codes.



Teacher Answer Sheet

1. My  planned a  to  in .

My family planned a trip to the zoo in Washington.

2. We will   and  in    .

We will leave the house and ride in the car on Friday after school.

3. My  and  and  , too.

My brother and sister and dog will go, too.

4.   in  is .

My favorite class in school is science.

5.    in .

We will have homework in math.

6.     and  on the .

We will have great food and snacks on the trip.

7. My , ,  , and     .

My brother, sister, great aunt, and dog will go home after the weekend.