Deciphering Morse Code

DISCOVERY WORLD
@HOME

Introduction

Explore a type of code that can be sent anytime, anywhere! Learn the dots and dashes of Morse Code to create and decipher a scavenger hunt.

Materials

- Writing Utensil
- Paper

Do Ahead of Time

Before beginning this project, do at least one of the following:

- Review the Morse Code key (below)
- Watch this **"Learn Morse Code "** video.

Morse Code Key

```
A •-        J •---       S •••
B -•••      K -•-        T -
C -•-•      L •-••       U ••-
D -••       M --         V •••-
E •         N -•         W •--
F ••-•      O ---        X -••-
G --•       P •--•       Y -•--
H ••••      Q --•-       Z --••
I ••        R •-•
```

Directions

Use the chart on the left to decipher the clues below.

1 Decode the messages below to discover items for a scavenger hunt.

2 *Go on a Scavenger Hunt!* Take a walk in your neighborhood or your own back yard to find the items below!

a. ••• / • / --- ••• / • / •• / •••

b. ••• / ---- / ••• / •• / --- / --- / • / •••

c. •---- ••• / •• / ••-• / •••- / • / --- / • / ••- / - ••-• / ••- / ••• / --• / •••

d. ••• / - / •• / ••-• / --- ••/-- •- "-•••" ••• / ••-• / •• / •---/ •

e. ••• / -- / •- / ••-• / ---- ••-• / --- / --•

f. ••• / --- / -- / • / - / ••-• / •• / -- / --- ••• / --- / --- / -- / •••

l. - / ••• / • / • ••• / --- / --- / - / •••

3 After you have completed the scavenger hunt, create your own with Morse Code and items around your house.

PART 2: CREATE YOUR OWN SCAVENGER HUNT

Directions

Create your own scavenger hunt for someone else to solve using Morse Code!

Note: You will need 2 or more people for this activity.

1. Create a list of items for someone else to find.
   a. Include a few challenging items, too! For example, something in the back of the fridge or a specific marker

2. Decide how to deliver the codes. Will you be writing the code down, or sending the messages without writing?
   a. Reminder: Morse code can be both auditory or visual!
   b. Think about using a light (like a flashlight or the one on your phone) or an item that makes noise to send your Morse Code messages.

3. Ask someone else to decipher the scavenger hunt you created! See how many words they can solve and then find!

Take it Further:

1. Use a flashlight or the light on a cell phone to send the scavenger hunt to a friend or neighbor in another building.

2. Add an extra challenge by including a time limit to decode the hunt or to finding the items!

Background:

In the mid 1800s, a man named Sam Morse received a letter stating that his wife was sick. He traveled home to see her, but learned that she had already passed away before he arrived. During this time, messages took weeks to be delivered and Morse wanted to create a way to make communication faster. He helped to develop the electric telegraph system - a way to turn electrical pulses into messages. When an electric current was received, the Morse system made an indent on a paper tape. Eventually, the letter code system was developed so that these indentations could be used to send immediate messages. Each letter of the alphabet was assigned a combination of short and/or long pulses, which today we refer to as dots and dashes. The letters that we use most often in English (such as "E" and "T") were given a shorter, simpler code. Instead of waiting weeks to receive a message, this made the relay of messages almost instant.

Did You Know?

The maritime distress signal used around the world is "SOS" or

$$\bullet\ \bullet\ \bullet\ /\ -\ -\ -\ /\ \bullet\ \bullet\ \bullet$$

The letters were chosen for simplicity's sake and not because the letters meant anything.