

Storm Tracking

Name: _____

Date: _____

Vocabulary

Compass - a tool used to show the current directions based on Earth's magnetic field.

Map - a scaled drawing of an area that shows physical features of the space.

Storm - a disturbance of the Earth's atmosphere that usually causes strong winds, rains, thunder, or snow.



Introduction

Stormy Days

1 How do storms affect us? Think of a time that your day was affected by a storm. What happened? Draw an image or write words that describe this experience.

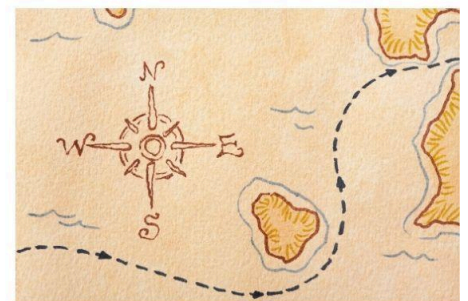
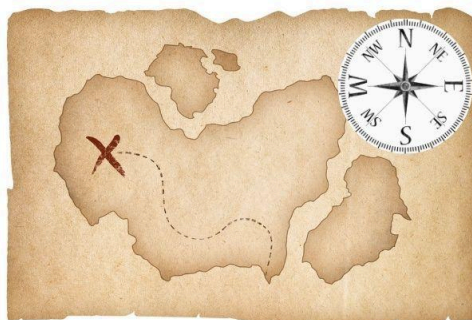
2 Why do you think it might be important to predict storms before they happen?

Activity 1

Using a Compass with Maps

1 To best track and predict where storms are moving, it is important to know the direction that the storm is traveling, which requires a compass. The maps below each have a compass.

Label the compasses with the directions - North, South, West, and East.



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2 Now we will use Ari's Compass to read a map.

- Place Ari on your desk.
- Turn your map below so that the compass rose on the map looks exactly like the compass on Ari.
- Keep your map in this orientation and place Ari onto the on the  map.
- Now practice reading the map using Ari.

Determine which direction each location is from your location, which is indicated as this icon:



Home



Fishing spot



Your boat



The bridge



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Activity 2

Tracking a Storm

The map below is an enlarged map showing where your town is located on the larger island. We know that the mountain range is East of your town. Position Ari on the square so that the mountains are on Ari's East. Now tap "Set North" on Ari so that Ari can help track the storm.

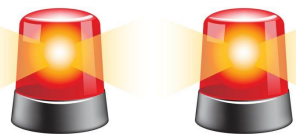
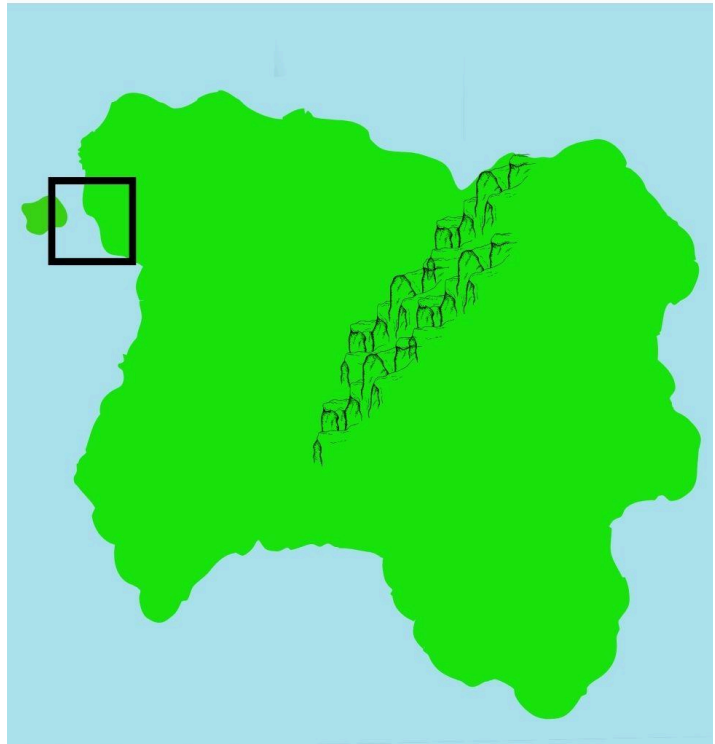


Monday - There has been a major storm spotted off the eastern coast of the island!

The storm is moving Northeast. Use Ari to locate the storm and draw an arrow to show the direction of the storm's movement on the map.

Move Ari in the direction that the storm is headed on the map.

Should we alert the town? Why or why not?



Wednesday -

The storm has changed course, traveling north up the eastern coast and then west, making its way over the mountains. Draw additional arrows to show the direction of the storm's movement after Monday. Move Ari in the direction that the storm moved on the map.

Should we alert the town? Why or why not?

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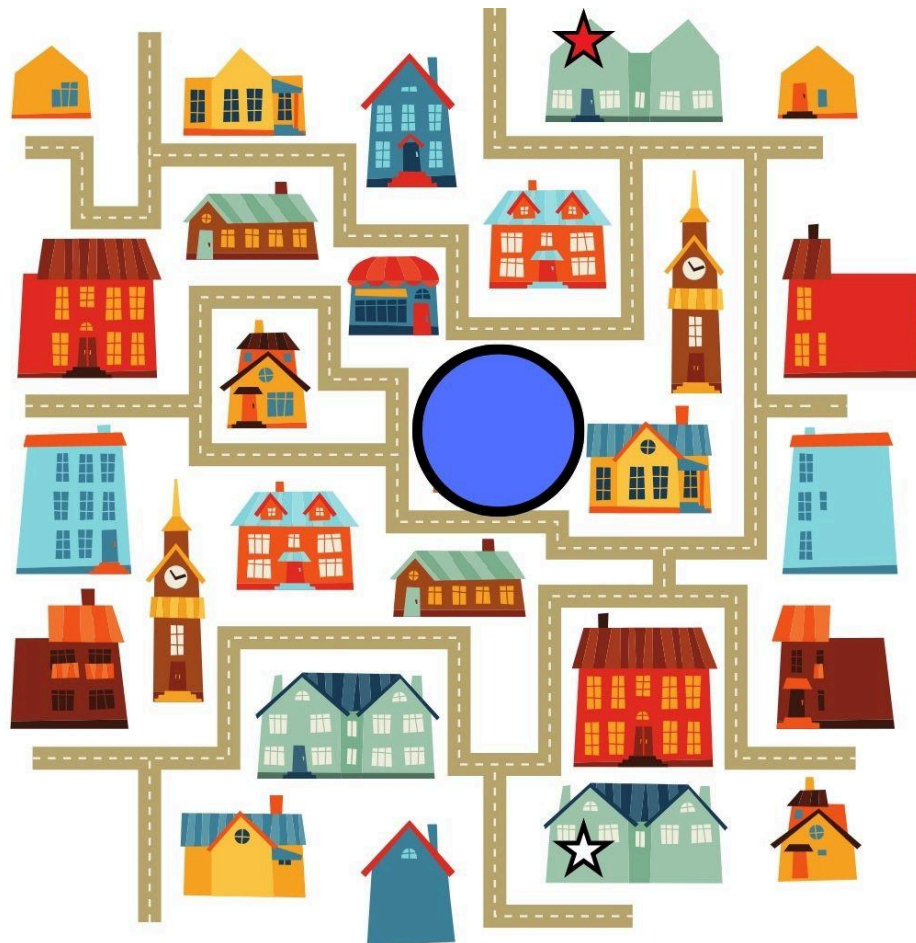
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Exit Ticket

1. The map below shows a local town. The house with the red star is located west of the house with the white star. Position Ari on the blue circle and use this information to set Ari's North. Follow the instructions below.

- ☐ A storm is coming to your town from the west and moving east. Circle the house(s) that will be affected first.



- ☐ You are currently in the building with the red star on the front. Draw a path that will help you escape the storm.

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2. How can a compass be used to predict a storm's movement?

Criteria for Success:

- Accurate use of compass directions (north, south, east, west) to describe the storm's movement
- Correct identification of locations or landmarks affected first based on the storm's direction
- Explanation includes specific directional language (e.g., moving east toward the white star) and shows how the compass helps predict the storm's path
