Midde Science Virtual Learning

Earth Science

Hurricanes

April 15th, 2020

7th Grade Science
Lesson: April 15, 2020

Learning Target:
I can model the factors that create hurricanes

Let's Get Started:

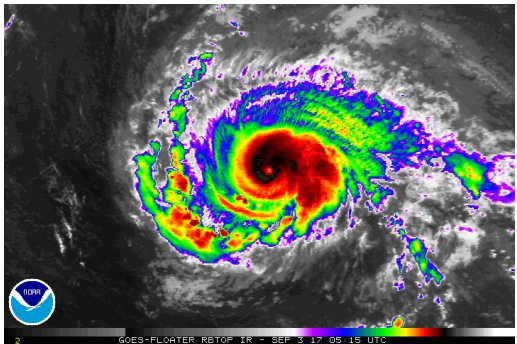
Bell Ringer: Take this short quiz and see what you already know about hurricanes. Quizziz

Next

1. **Follow the links below and find a combined 10 facts from your research.**
2. **Ten Fact: List your facts (10 facts only) on a separate piece of paper.**

Fact Find: NOAA

Fact Find: NOAA Ocean Service



How is the coriolis effect related to hurricanes?

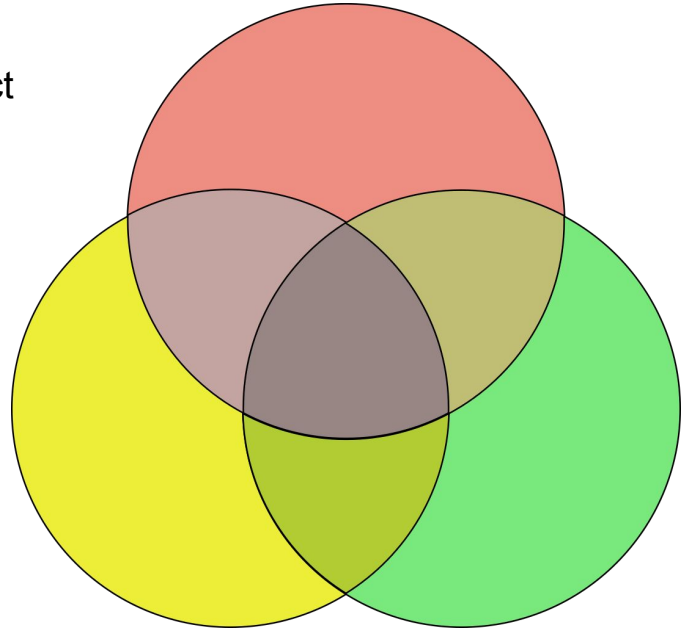
1. **Watch the video**

2. **On your paper sketch what hurricane will look like on the northern hemisphere and then the southern hemisphere.**

Venn Diagram Challenge

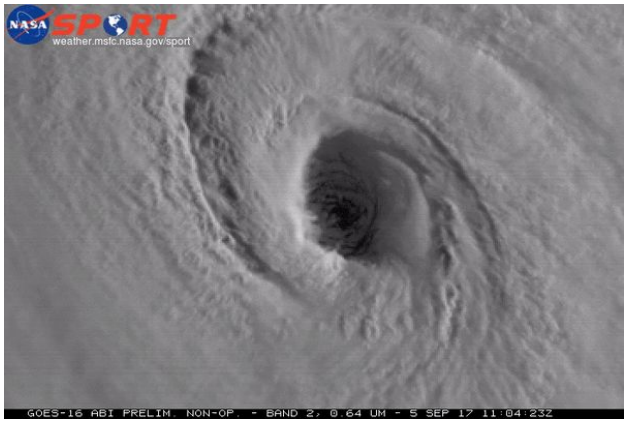
1. Draw this venn diagram
2. Place the terms in the correct areas.

Hurricane
Typhoon
North Atlantic
Northeast Pacific
South Pacific
South Atlantic
Cyclone
Indian Ocean



You do the research

1. Research this question: Is there a difference between a hurricane, cyclone and typhoon?
2. Now, on your paper report your findings.



Use your learning

1. On your paper create a list like this.

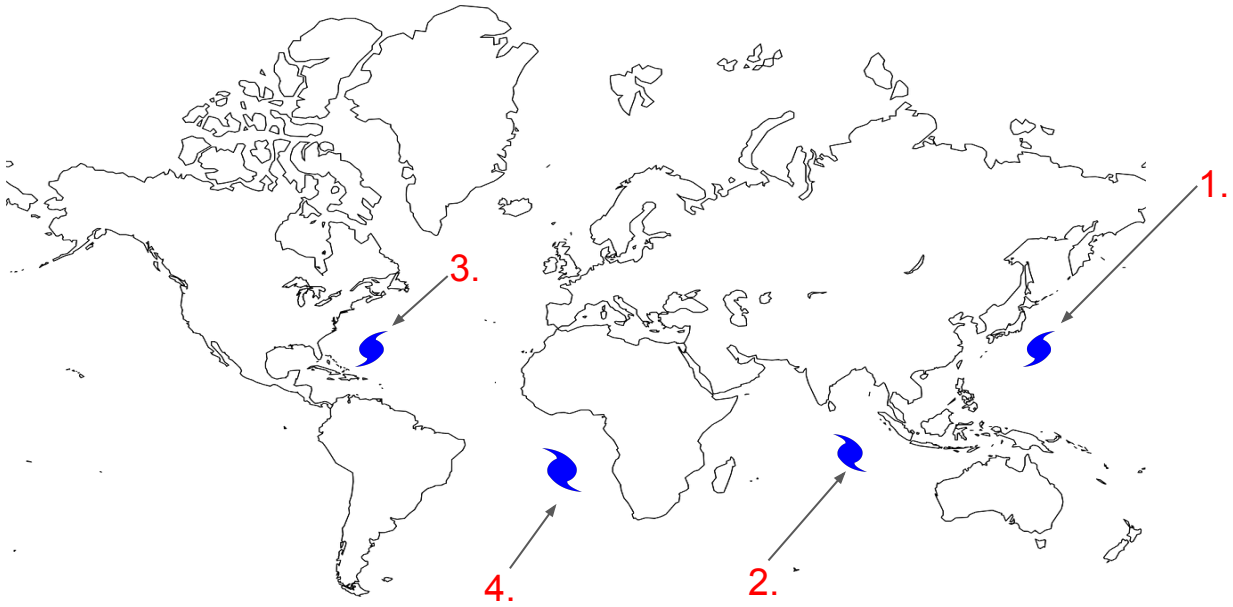
1.

2.

3.

4.

2. Now, study the map carefully.
3. Write in each space your inference. For example is point
4. 1. a cyclone, hurricane, or typhoon?



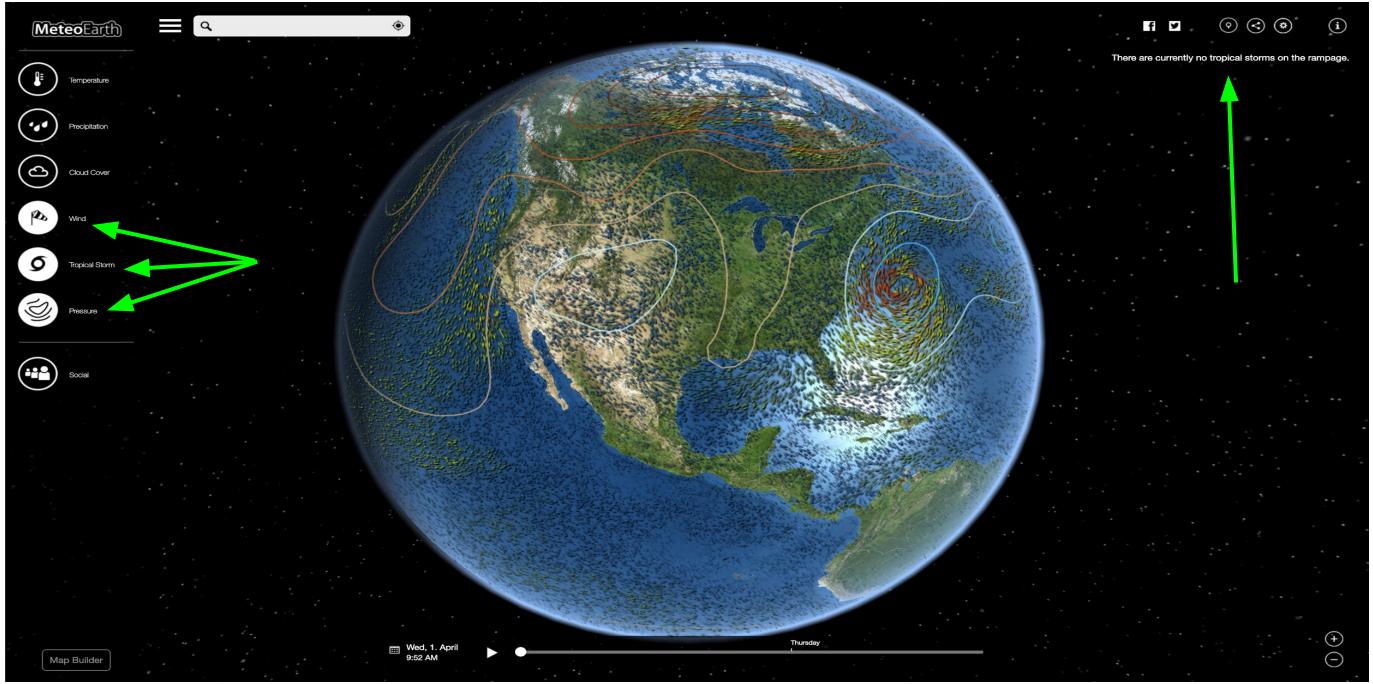
Go on a hurricane hunt

1. Follow the link by clicking here

[Meteoearth]

2. Be sure to have these buttons engaged.
   - Wind
   - Tropical Storm
   - Pressure
3. Check the indicator on the upper right corner. If there are no tropical storms feel free to explore weather on the earth. If there is a tropical storm proceed to the next step.
4. After you have found your tropical storm document the following information on your paper.

a. Storm name
b. Storm location
c. Direction headed
d. Wind speed

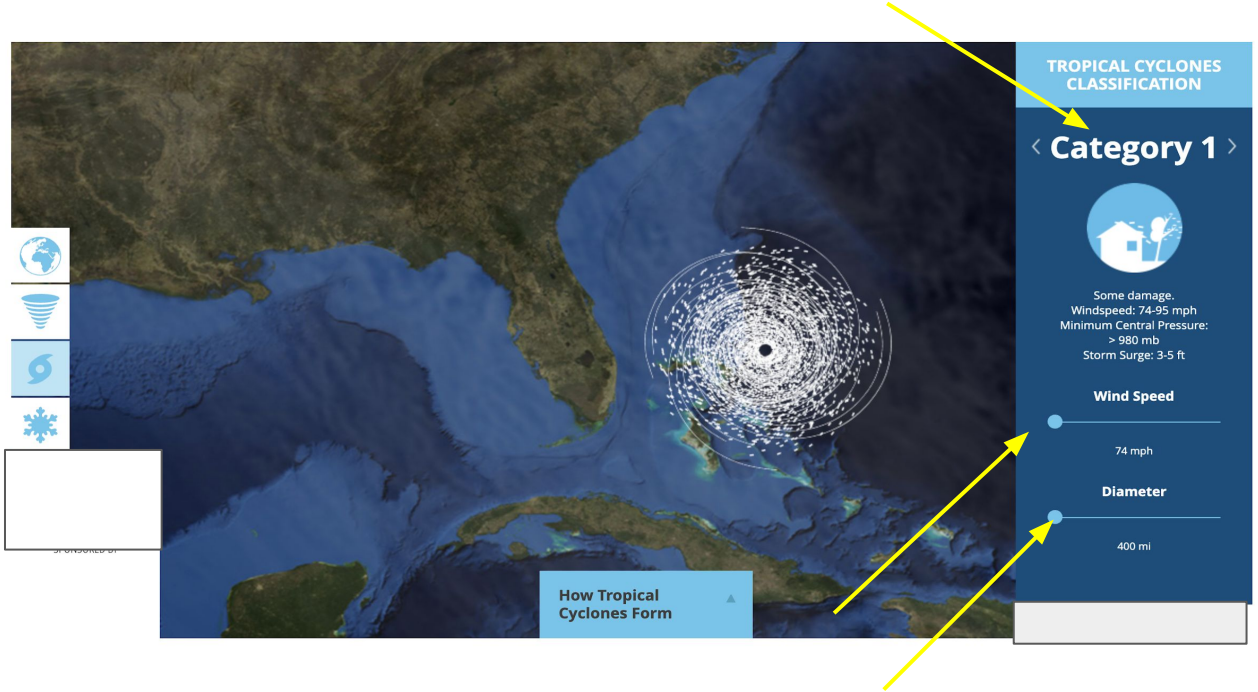


Using a Tropical Cyclone Simulator

1. Start by clicking here
2. Become familiar with the wind speed slider.
3. Become familiar with the diameter slider.
4. Become familiar with the category selector.

Answer these question on your paper.

1. **How many storm categories are there?**
2. **What are the wind speeds for each category?**
3. **What distinguishes each storm category?**



On your paper answer the questions below (write in complete sentences)

1. What are other names used to describe hurricanes?
2. What kind of air pressure causes hurricanes to develop?
3. What temperature must the water be in order for hurricanes to develop?
4. What is Storm Surge?
5. What other natural disasters can hurricanes trigger?
6. Can you describe areas (countries, states, cities) that can be directly affected by hurricanes?
7. Which ways do hurricanes rotate as related to their particular hemisphere?
8. What are storm (hurricane) classifications and how are they measured?

Answer Key

Slide 6. Answers

1. Typhoon
2. Cyclone
3. Hurricane
4. Hurricane

Slide 9. Answers

1. What are other names used to describe hurricanes?
   Typhoon (Tropical) Cyclone Hurricane
2. What kind of air pressure causes hurricanes to develop?
   Low Pressure
3. What temperature must the water be in order for hurricanes to develop?
   82 degrees f or higher
4. What is Storm Surge?
   A storm surge is caused by an abnormal rise in water levels and can often accompany hurricanes.
5. What other natural disasters can hurricanes trigger?
   Tornadoes, foolds, storms, storm surges, mud slides
6. Can you describe areas (countries, states, cities) that can be directly affected by hurricanes?
   Please like the eastern seaboard of the US, the Gulf of Mexico, Japan, and India.
7. Which ways do hurricanes rotate as related to their particular hemisphere?
   Because of the coriolis effect hurricanes rotate counterclockwise in the southern hemisphere.
8. What are storm (hurricane) classifications and how are they measured?
   Tropical Cyclones are measured using categories based upon air pressure and wind speed. There are 5 separate categories.

Check your learning with Quizziz by clicking the link below.

Quizziz: Hurricanes