7th Grade Science Day 5

Students will be able to explain how the uneven heating of Earth's surface influences weather.

Directions:

- 1. Record the weather each day using the document template provided on your own sheet of paper. Only record Temperature, Total Precipitation, Humidity, and Wind Speed. Do not do the questions on page 2. The link is under the link "<u>This Week's Weather</u>"
- 2. Click the link to the <u>PBS Cloud Lab</u>.
- 3. Select the "video intro" and watch it.
- 4. Once the video is over click the "Challenge" Button and sign as a guest.
- 5. On a sheet of paper classify the different types of clouds.
 - a. Make a chart of the different types of clouds
 - i. List the different types of clouds
 - ii. Describe each cloud types
- 6. Read through the tabs and watch the videos in the next section, "Inside a Megastorm."
- 7. Work through the "Cloud Analysis and Reconstruction" portion of the lab.
- 8. Use the "Storm Prediction" portion of the lab to see how different storms have changed over time.
- 9. After you have completed the lab answer the following questions on piece of your own paper.
 - 1. How does the Sun's uneven heating of Earth drive the creation of clouds?
 - 2. Severe Storms: What are the ingredients for a severe storm and where do they come from?
 - 3. How do clouds influence the exchange of energy between Earth, the Sun, and space? How might climate change affect this process?
 - 4. Why do storms spin in different directions in the northern and southern hemispheres?

Links:

Weather data PBS Cloud Lab