

Unit ..... Handout .....  
4 ..... 9 .....

*Lesson 6: Reading a Wind Map*

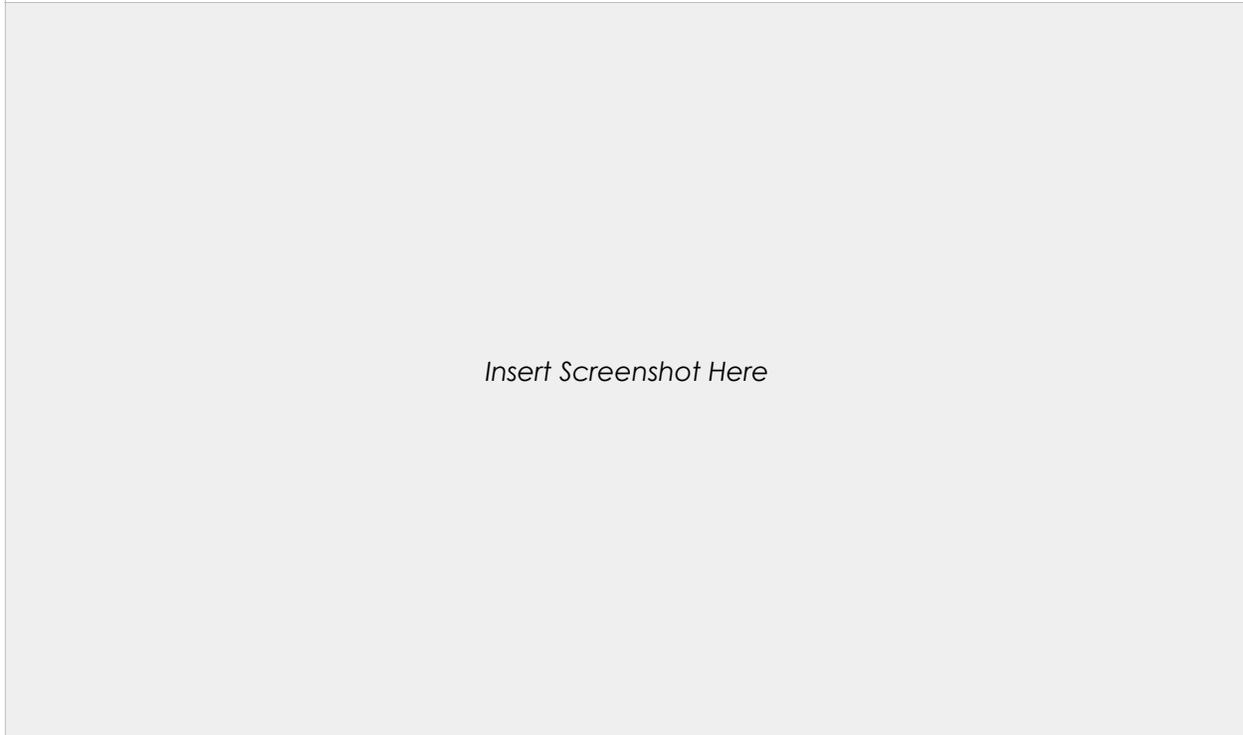
**Purpose:** ..... Analyze data from a wind map to identify areas of high and low pressure, identify weather fronts, and make predictions about weather.

**Guiding Questions:** ..... How is the movement of air useful to meteorologists?

**Directions.** Visit <http://earth.nullschool.net> to load the wind map (this is iPad compatible). Zoom in on the contiguous United States. Follow the instructions below.

**Low Pressure**

Find a low pressure system on the map. Remember, low pressure systems have warmer, less dense rising air. You can find one by looking for a location where the air is moving towards a spot. Take a screen shot of such a location and insert it into the space below. Draw arrows on the picture to show the movement of the air.



*Insert Screenshot Here*

**High Pressure**

Find a high pressure system on the map. Remember, high pressure systems have cold, more dense sinking air. You can find one by looking for a location where the air is moving away from a spot. Take a screen shot of such a location and insert it into the space below. Draw arrows on the picture to show the movement of the air.

*Insert Screenshot Here*

**Analysis 1.**

1. In which direction do low pressure systems rotate (in the Northern hemisphere)?
2. In which direction do high pressure systems rotate (in the Northern hemisphere)?
3. Look for a low pressure system in the southern hemisphere. In which direction does it rotate?
4. Look for a high pressure system in the southern hemisphere. In which direction does it rotate?

**Weather Front**

Find a weather front on the map. Weather fronts are indicated where two air masses meet and one or both of these masses changes direction. Take a screenshot of such a location and insert it into the space below.

*Insert Screenshot Here*

**Analysis 2.**

5. Look at the weather front you identified. What type of front do you think it is?
  
6. Give at least 2 observations that support your claim as to the type of front you identified.

Name .....

Period .....

Date .....

**Verification**

Now it's time to verify if the claims you made (low pressure, high pressure, and weather fronts) are correct. Visit a weather website (such as Weather Underground or [weather.gov](http://weather.gov)) and look for a current weather map that shows pressure systems and fronts. Insert that image into the space below.

*Insert Screenshot Here*