Unit 7 Atmospheric Movement

8th grade Teacher Information

Objectives

**Ⓢ SCI.8.10A** Recognize that the Sun provides the energy that drives convection within the atmosphere and oceans, producing winds and ocean currents.

**Ⓢ SCI.8.10B** Identify how global patterns of atmospheric movement influence local weather using weather maps that show high and low pressures and fronts.

**Ⓢ SCI.8.10C** Identify the role of the oceans in the formation of weather systems, such as hurricanes.

**Activity 1 Convection**

**Materials:**

* Lamp with incandescent light bulb, paper spiral hanging above lamp

Hint: Use the lightest paper and thread possible

* 2-liter bottles of water, clear plastic shoebox, 5 Styrofoam cups, red food coloring, medicine dropper, coffee maker for heating large amount of water
* Map with ocean currents, colored pencils

Hint: If you can not print in color for the students use a projector to project map for coloring or you could make a class set in color.

Focus: I can recognize that the Sun provides the energy that drives convection within the atmosphere and oceans, producing winds and ocean currents.

*Language Objective:* I can watch a video and take notes.

**Activity 2 Global Winds and Local Weather**

**Materials:** Colored pencils

Focus: I can identify how global patterns of atmospheric movement influence local weather using weather maps that show high and low pressures and fronts.

*Language Objective:* I can read and follow instructions.

**Activity 3 The Ocean’s Role in Weather Systems**

**Materials:** Hurricane Tracking Map

Focus: I can identify the role of the oceans in the formation of weather systems, such as hurricanes.

*Language Objective:* I can talk with my partners to make decisions.