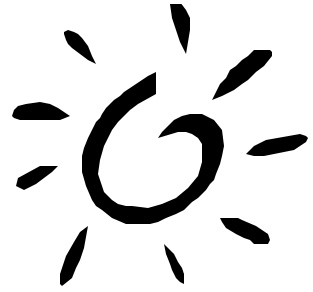


Name:

Date:

Activity 2.6.2

Making a Warm Front/Cold Front



Objectives:

To discuss the four types of fronts.

To use that knowledge of fronts to determine the type of weather along fronts labeled on a weather map.

Materials:

- Clear plastic shoe box
- Two 100 ml beakers
- Hot plate
- Thermometer
- Thermal gloves or pot holders
- Ice
- Water
- Goggles
- WEATHERlogs

Procedure:

1. Pour 80 ml of water into one beaker.
2. Place the beaker on the hot plate and heat the water to 90 degrees Celsius.
3. Put the ice in the other beaker.
4. Use the thermal gloves or pot holder to place the beaker of hot water into the shoe box approximately 1 centimeter to the right of center.
5. Then place the beaker of ice 1 centimeter to the left of center in the shoe box. (They should be approximately 2 centimeters apart.)
6. Cover the shoe box and observe.

Observations:

Conclusions:

Using your model, explain what happens when a cold front moves into the area.



EXPAND/ADAPT/CONNECT

Objectives:

To observe models of fronts.

Materials:

- 250 ml beaker
- 100 ml of oil
- 100 ml of water
- Red food coloring
- WEATHERlogs



Procedure:

1. Take 100 ml of oil and place it in a 250-ml beaker.
2. Place 3 or 4 drops of red food coloring in 100 ml of water.
3. Carefully pour the water down the side of the beaker. Record your observations

Observations:

Conclusions:

Compare what you observed with what happens when a cold air mass meets a warm air mass.

Observe the sky for two weeks and make weather predictions based on clouds and the arrival of fronts.