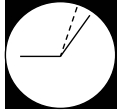




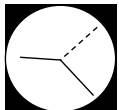
2 minutes



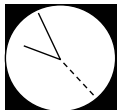
4½ minutes



3 minutes



13 minutes



33½ minutes

**Science Organization:** Class gets oriented to the day's lesson

The students are seated in table groups. The teacher takes attendance and asks the class who is missing. She announces to the class that she will return their papers tomorrow, and then instructs them to open their books to page 588.

**Whole-Class Seatwork:** Class discusses fronts and pressure centers using weather maps

The teacher draws the class's attention to the weather maps in the textbook. She directs the students to find high pressure centers and low-pressure centers, as well as cold fronts and warm fronts. She asks, "What do you notice about the fronts and the pressure centers?" A couple of students share their observations with the class.

**Whole-Class Practical Work:** Teacher demonstrates movement of fronts with different colored balloons

The teacher uses three different-colored balloons to represent warm air (red balloon), cooler air (yellow balloon), and cold air (blue balloon) moving along a weather map that is being projected on the wall. She holds the balloons together on the map and explains that the space among the balloons is the low pressure center. She then holds the blue balloon up against the map and explains that the high-pressure center would be in the middle of it as it represents a cold air mass. A student asks a question about tornados in relation to low pressure. The teacher clarifies and briefly discusses the motion of convection currents, the formation of funnel clouds, and tornados with the use of the balloons. She tells the class they will be seeing this in their upcoming video.

**Whole-Class Seatwork:** Teacher goes over instructions for activity

The teacher introduces today's activity about weather stations. Students are given a list of 12 U.S. cities and a blank map. They are to build a weather station for each of the listed cities, marking warm and cold fronts, areas of high and low pressure, and regions of precipitation with different shading conventions. In addition, students need to interpret the data and forecast the weather (given a specific date). The class clarifies some issues before students begin the activity.

**Independent Seatwork:** Students work on weather station map activity

Students work on the weather station map activity in groups of three or four. The teacher walks around the classroom answering questions and checking their progress. She periodically announces instructions and clarifications as they work. She also informs the students that they should consult with their group mates to decide where to put the warm and cold fronts. She says, "you can explain why you think the front needs to go somewhere and then someone else can either debate with you or agree with you." Students are responsible for their individual maps. They work on this activity until the end of class. When the bell rings, the teacher makes a few closing remarks. She tells them they need to bring their maps and instructions to class the next day.