

Engineering a Barometer

1. Measure the diameter of the top of the glass.
2. Cut a piece of the balloon big enough so its diameter, when stretched, will be at least one inch larger than the top of the glass.
3. Stretch the balloon over the top of the glass and seal it with a rubber band and tape.
4. Cut one end of the straw to make a pointer. Tape the other end to the center of the balloon in a horizontal position.
5. On the right end of the index card, make nine short lines to be used as a scale and number them 1–9.
6. Position the index card behind the glass so the straw is lined up with the number 5. Then tape the card to the glass.
7. Make a chart to record daily changes in air pressure. On your chart, title the columns as follows: date, weather conditions, barometric reading (1–9), and weather observations.
8. Record your observations over several days. Also make note of the weather conditions each day. Using information from your chart, describe how changes in air pressure influence weather conditions?



Steps 1–4 Pictured