

Bell Ringer

1. What are the three ingredients to make a cloud?
2. What kind of cloud would you expect to produce snow?



Finish movie



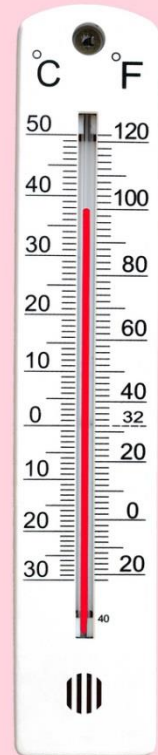
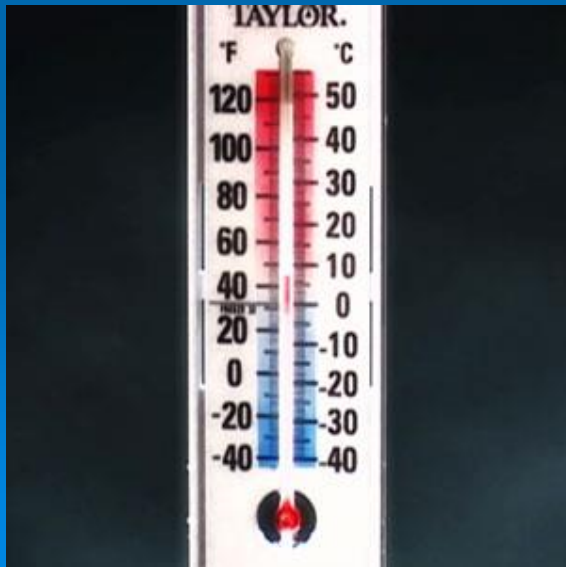
Weather Tools



- **What are tools? What do they do for us?**
- **What kind of tool would you use to build a house?**
- **What kind of tool would you use to get from one city to another?**
 - **To measure distance?**

Thermometer

- A tool used to measure temperature
 - How hot or cold it is outside
- Thermometers have different scales
- We measure in Fahrenheit!



Rain Gauge

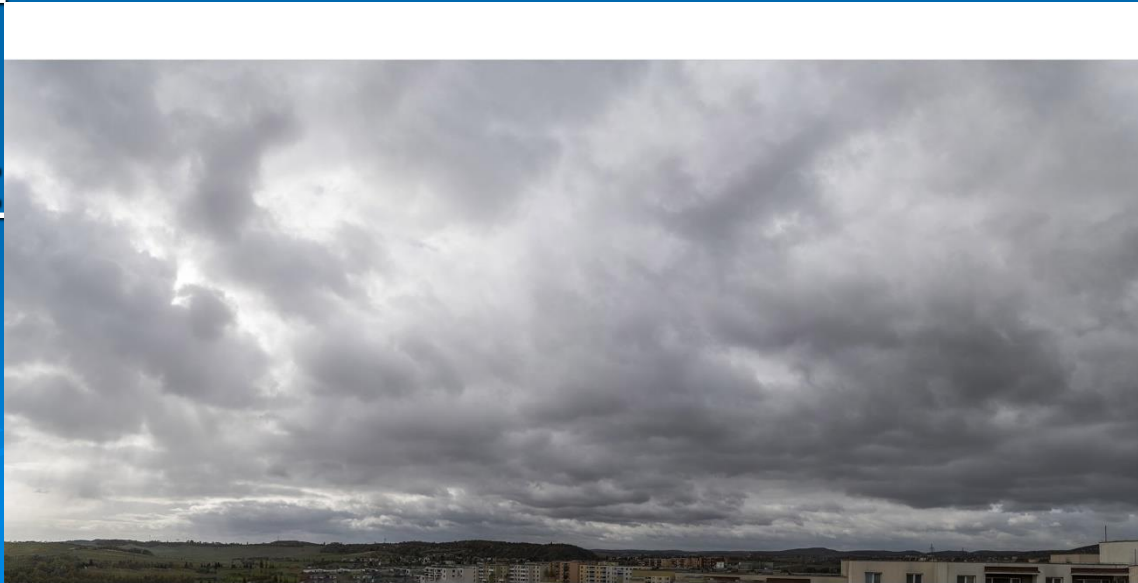
- A tool used to measure the amount of rainfall
- How much rain/snow have we received in Saratoga Springs during the month of February? Units?
- In the US, we use Inches/feet



Observations

➤ Our eyes/ears are a tool. What can we use them to measure?

- Visibility
- Cloud cover
- Type of cloud
- Lightning/thunder
- Etc.
- Units for visibility:
Percent
E.g. 45% visibility.



Hygrometer

- A tool used to measure relative humidity
- How much water is in the air?
- Units: Percent humidity (63% humidity)

Think: h=humidity

h= hygrometer



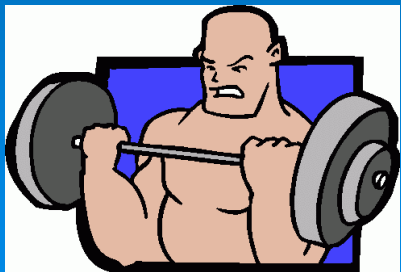
Barometer

- A tool used to measure air pressure
- The weight of air pushing on the earth's atmosphere
- Units: millibars OR atmospheres (mbar/atm)

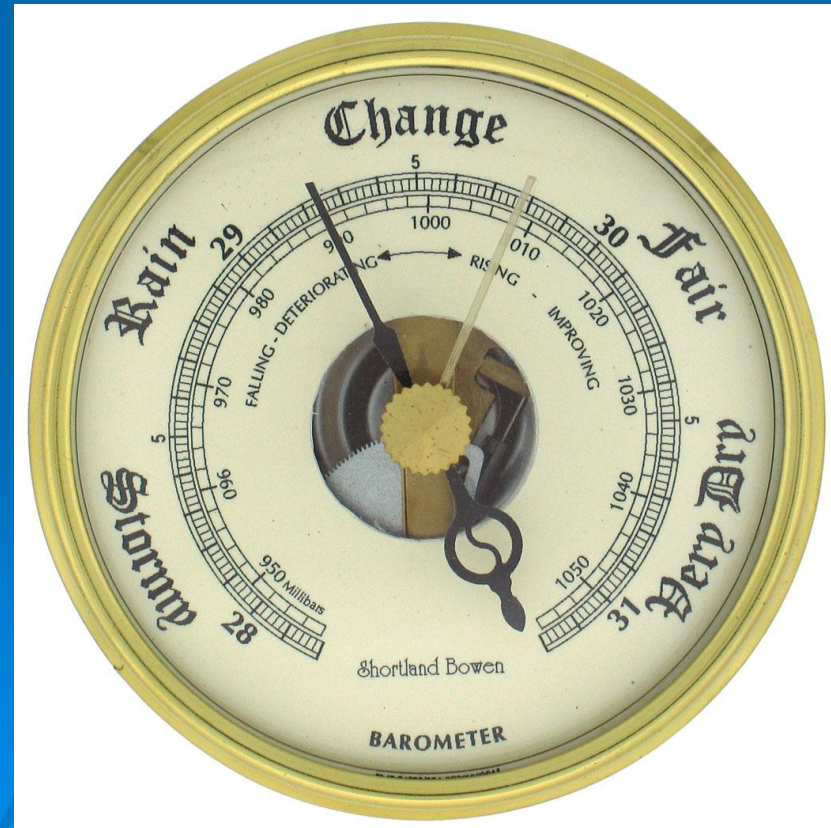
Think:

Barbell = weightlifting

Bar = weight of air



https://www.youtube.com/watch?v=4ozwCtUuU_s

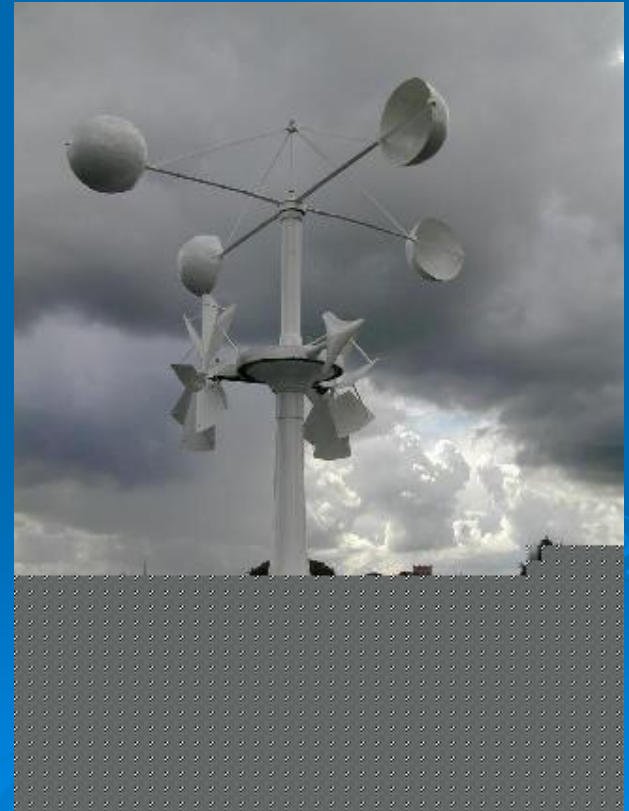


Anemometer

- A tool used to measure the wind speed
- How fast is the wind blowing?
- Units: mph

Think: Ants= move fast

Anemometer= how fast wind is moving



Wind Vane

- A tool used to measure the DIRECTION of the wind
- The arrow points in the direction from which the wind is blowing



Weather Satellite

➤ Satellites have the ability to measure lots of different things.

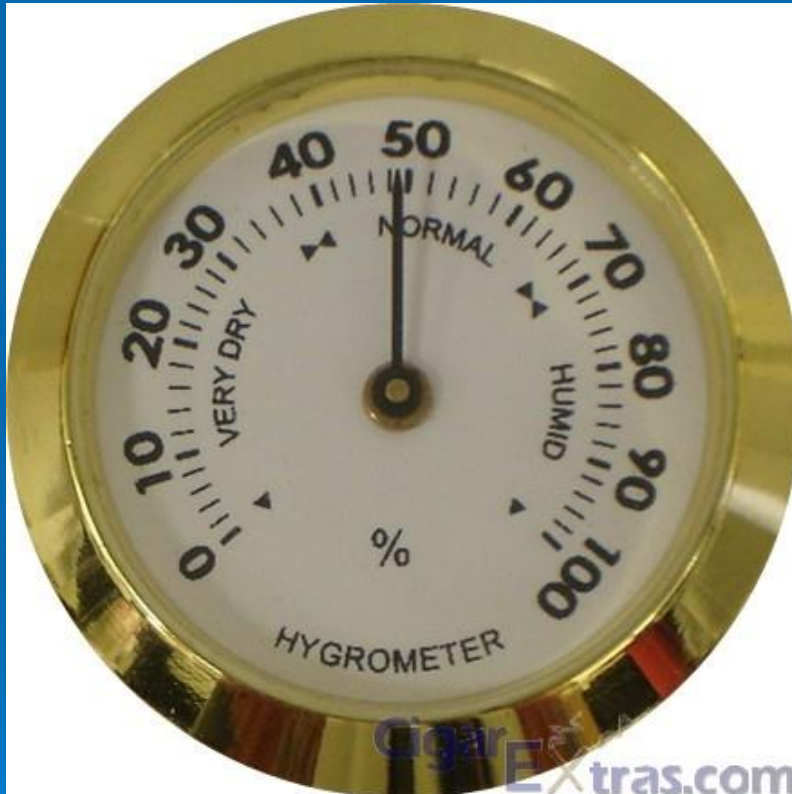
- <https://earth.nullschool.net/#current/wind/isobaric/1000hPa/orthographic=-97.18,32.70,1115/loc=-70.397,20.311>
- Hurricanes/storms
- Cloud cover
- Global winds/currents
- Etc.
- <https://www.youtube.com/watch?v=zCxxQcvBwKw>




Jill wants to measure the amount of moisture in the air. She does not want the water in the air to disorder her hair. What instrument should she use?



HYGROMETER!



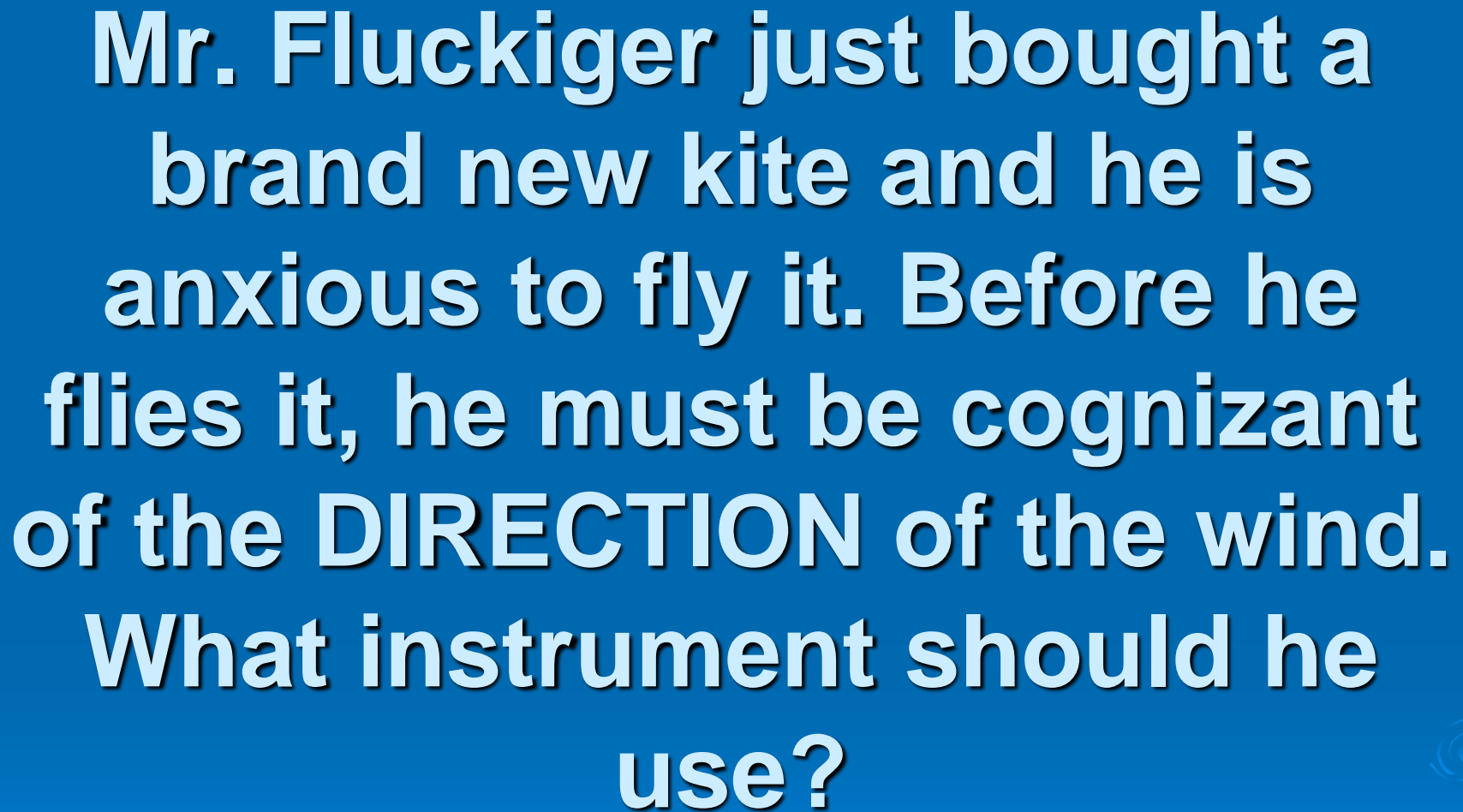
Mr. Hammer plans to go out over the weekend on his new sailboat. First, he must know how fast the wind is blowing to see if it's appropriate to sail. What instrument should he use?



ANEMOMETER!



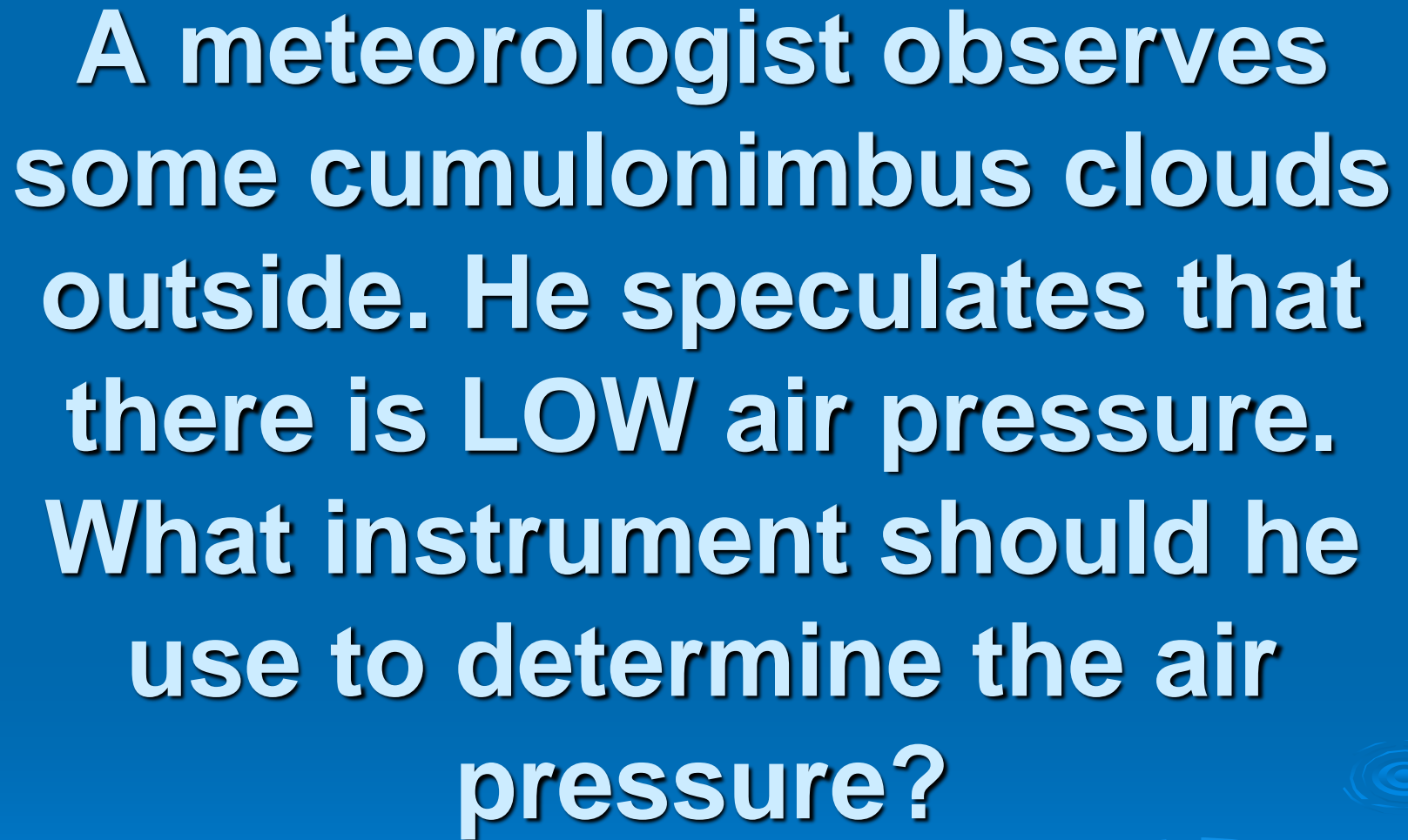
Mr. Fluckiger just bought a brand new kite and he is anxious to fly it. Before he flies it, he must be cognizant of the DIRECTION of the wind. What instrument should he use?



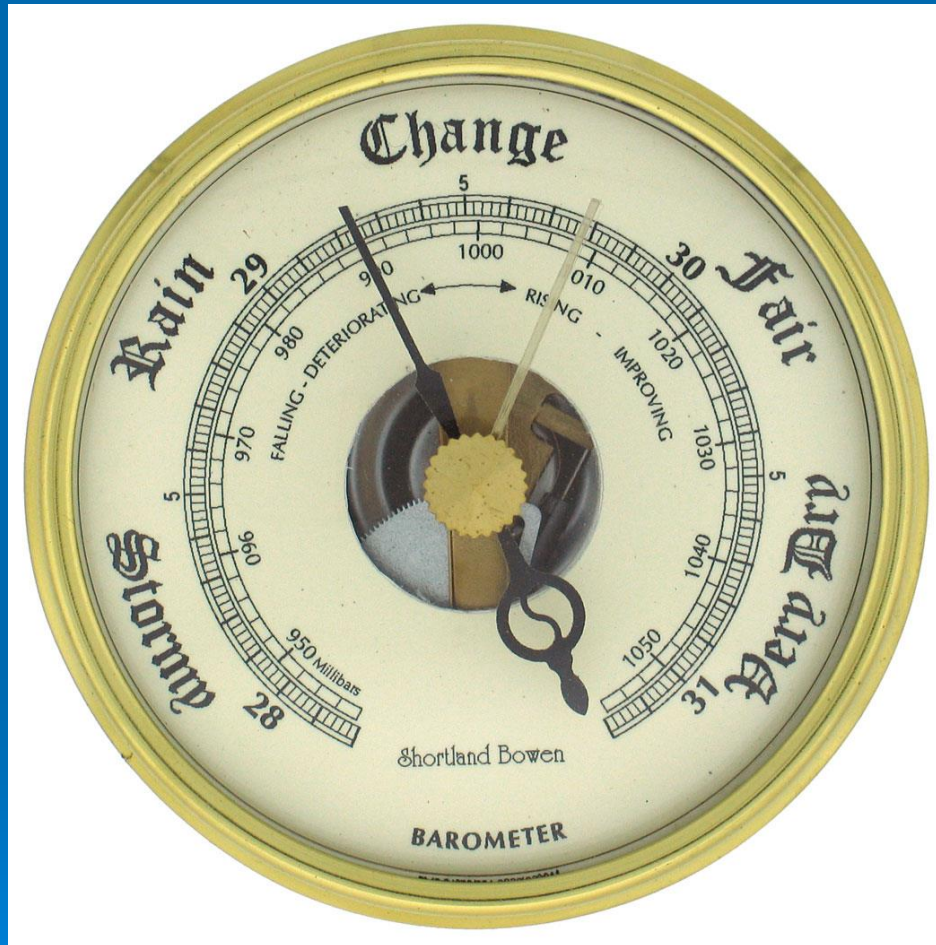
WIND VANE!




A meteorologist observes some cumulonimbus clouds outside. He speculates that there is LOW air pressure. What instrument should he use to determine the air pressure?



BAROMETER!



Ryan is working on his Science Fair project. He plans to measure the amount of rainfall that has fallen in his neighborhood over the past two weeks. What instrument should he use?

The background of the slide is a solid blue color. In the lower half, there are several faint, light blue circular ripples that resemble water droplets hitting a surface, creating concentric circles. These ripples are positioned in the bottom right and bottom center areas of the slide.

RAIN GAUGE!



Projects

