

# Air Pressure

How to measure the air around  
us.

# Air pressure

- is the force exerted on you by the weight of tiny particles of air (air molecules). Although air molecules are invisible, they still have weight and take up space. Since there's a lot of "empty" space between air molecules, air can be compressed to fit in a smaller volume.

At sea level, the **air pressure** is about 14.7 pounds per square inch.

=1013.2 millibars

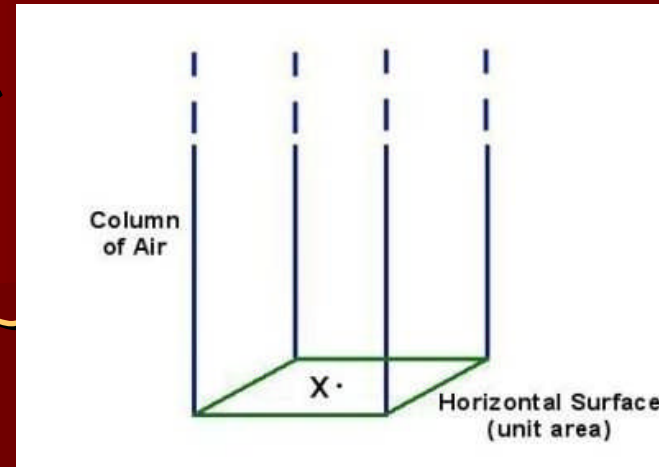
=1013.2 Hectopascal

=29.92 inches of mercury



- Low pressures ~ 1005mb.

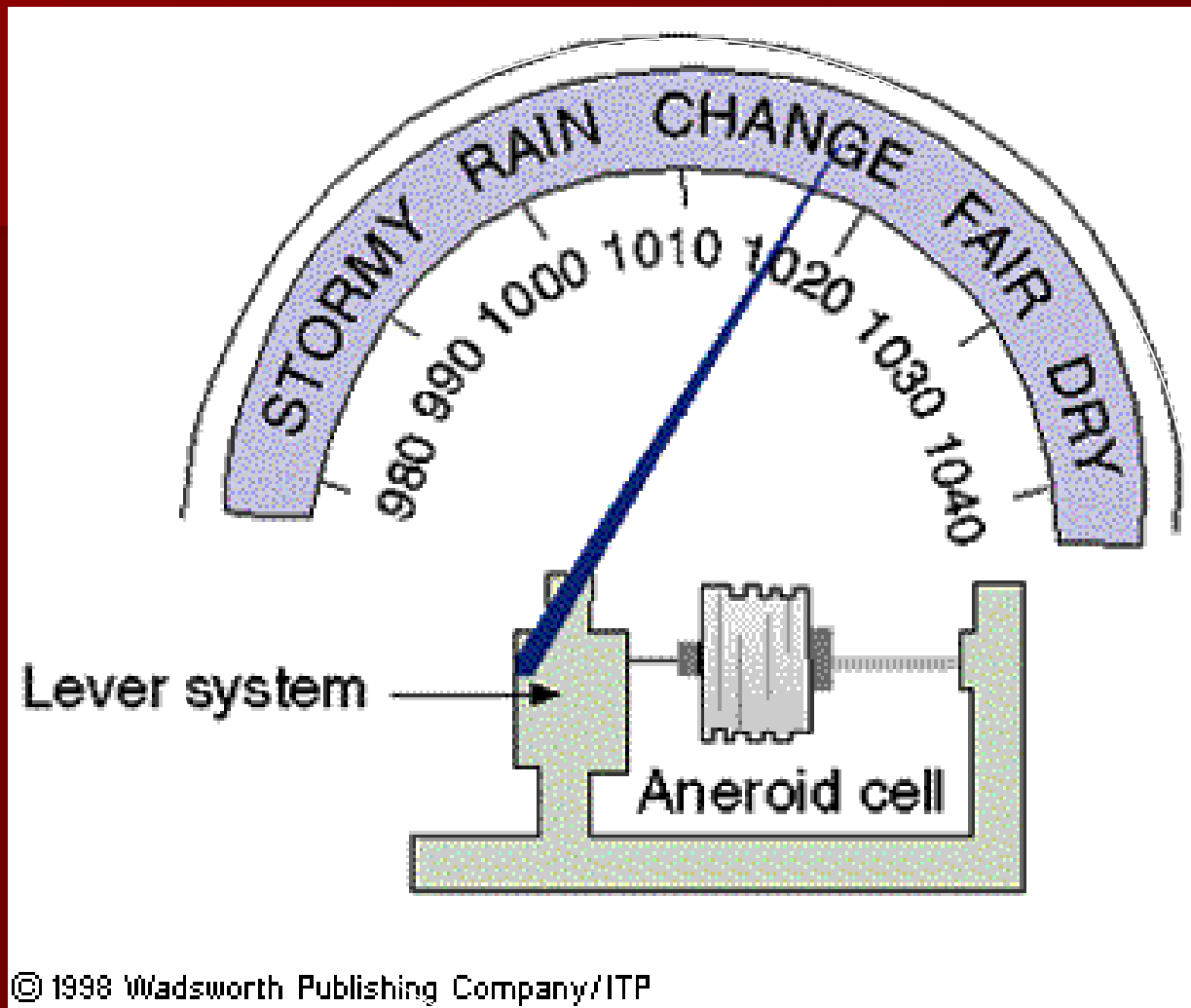
- High pressures ~ 1040 mb.



- Under a low pressure area, **air is rising** and as a result, the surface has less air molecules than before. Under a high pressure area, **air is sinking** towards the surface and piles up before spreading out.

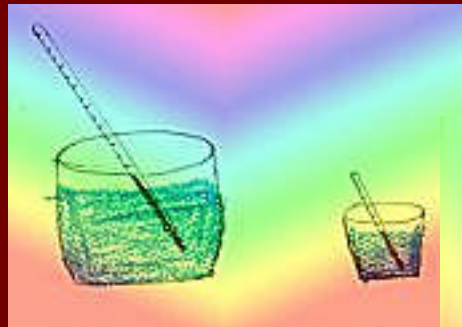


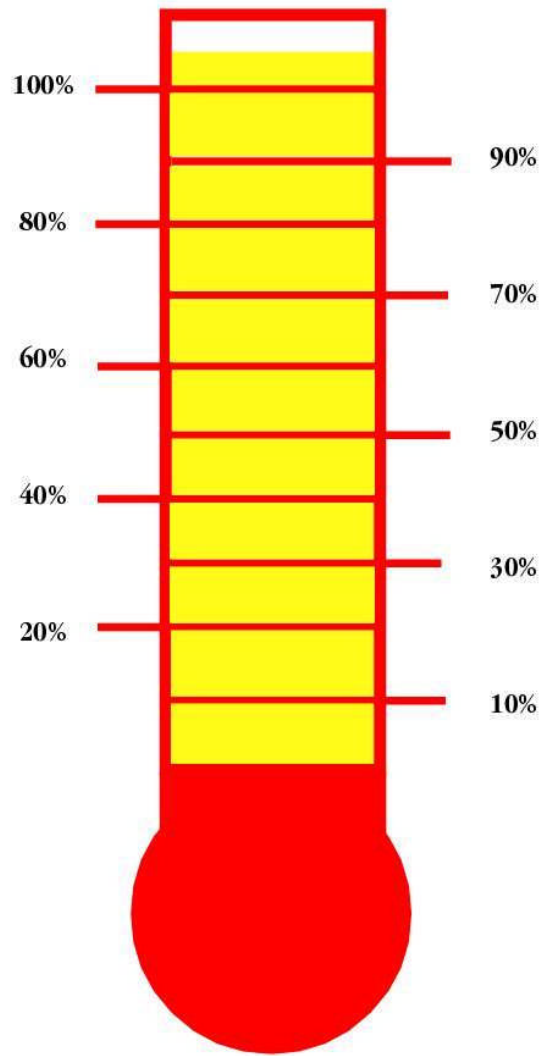
Digital Barometer



# Temperature

- is a measure of the average heat or thermal energy of the particles in a substance.







# Unit of temperature

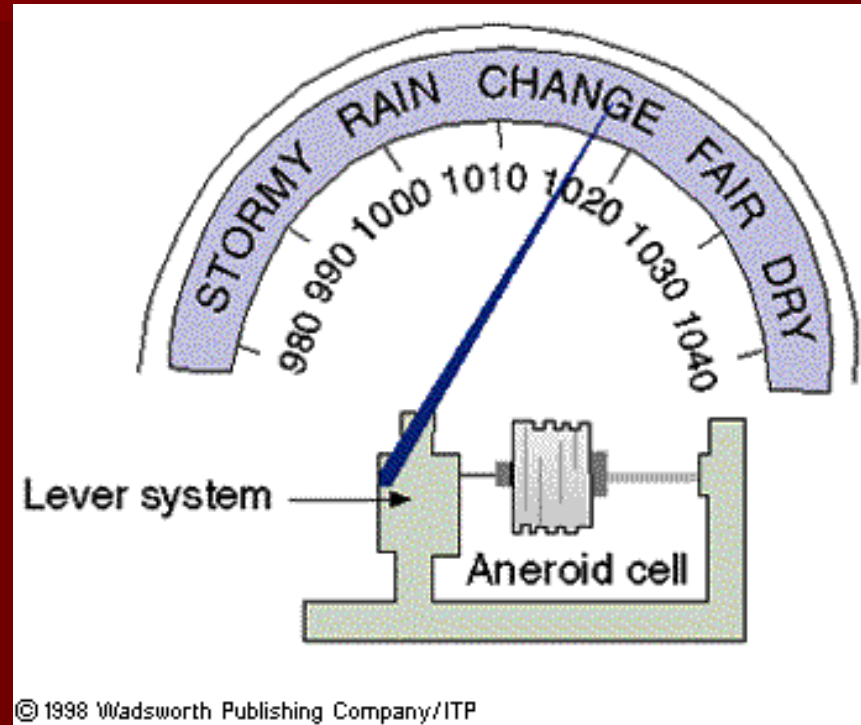
- Degrees Celsius
- Degrees Fahrenheit

# Quiz

1. \_\_\_\_\_
  2. \_\_\_\_\_ Unit of temperature
  3. \_\_\_\_\_ is the force exerted on you by the weight of tiny particles of air
- At sea level, the **air pressure** is about
4. \_\_\_\_\_ inhg
  5. \_\_\_\_\_ millibars
  6. \_\_\_\_\_ pounds per square inch(psi)
  7. \_\_\_\_\_ is a measure of the average heat or thermal energy of the particles in a substance

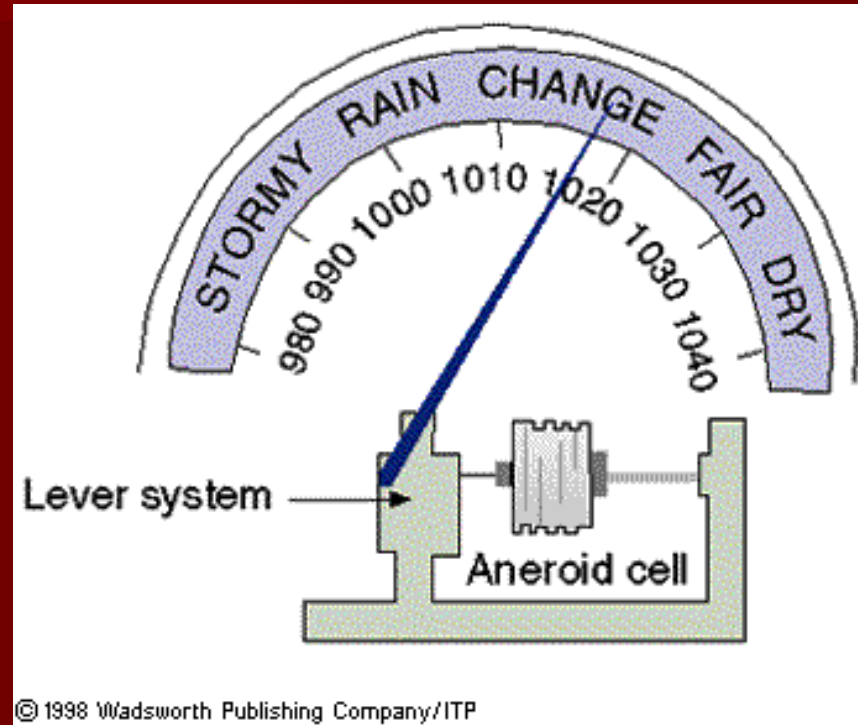
# Quiz

8. \_\_\_\_\_



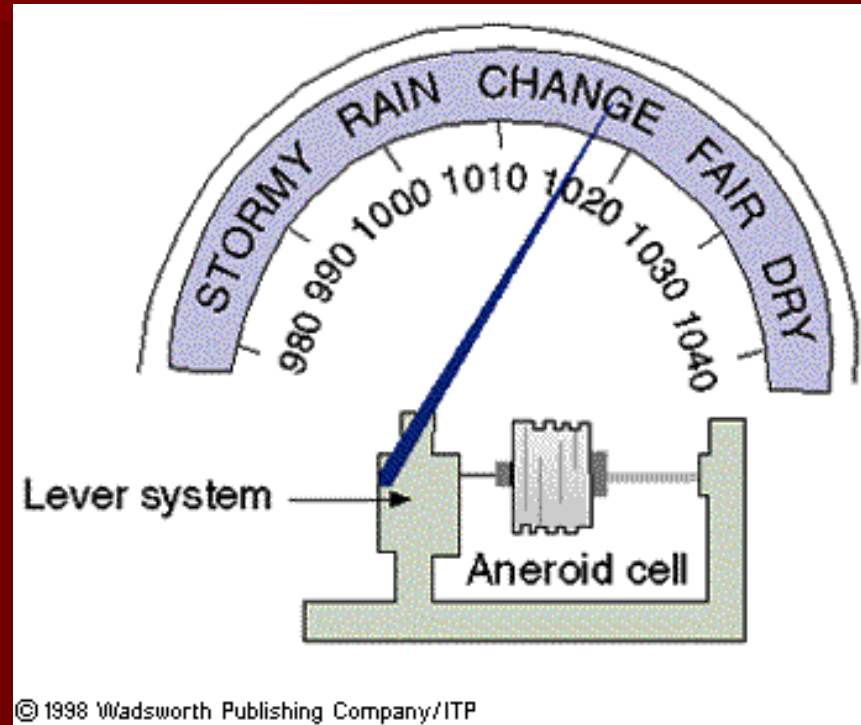
# Quiz

■ 9. \_\_\_\_\_



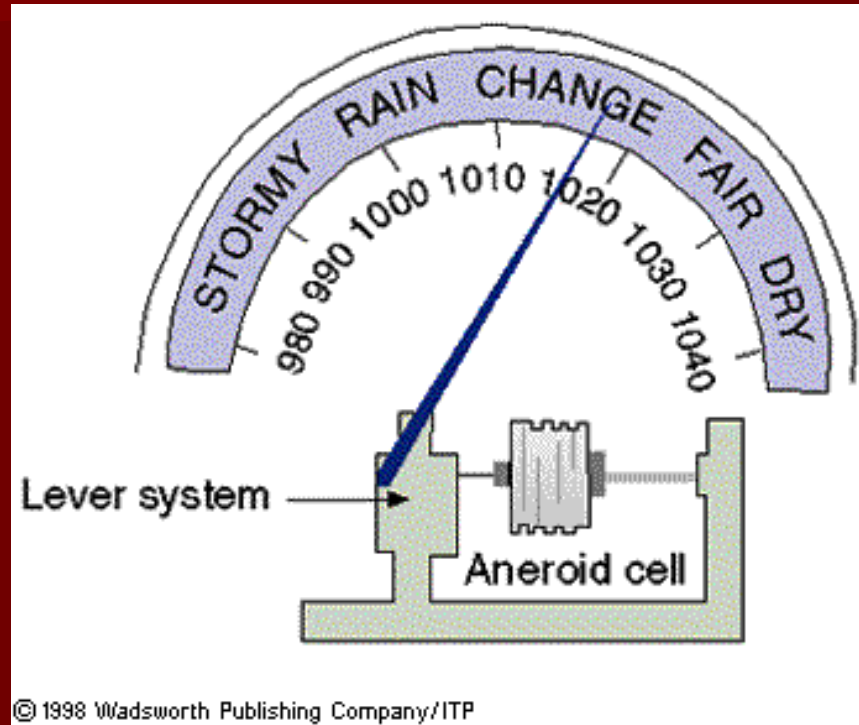
# Quiz

■ 10. \_\_\_\_\_



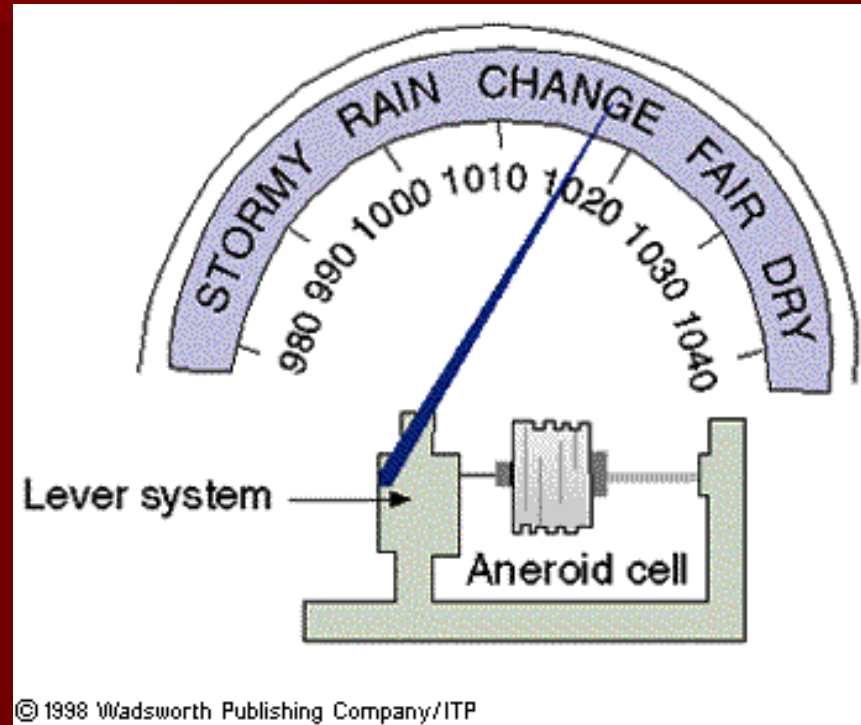
# Quiz

■ 11. \_\_\_\_\_



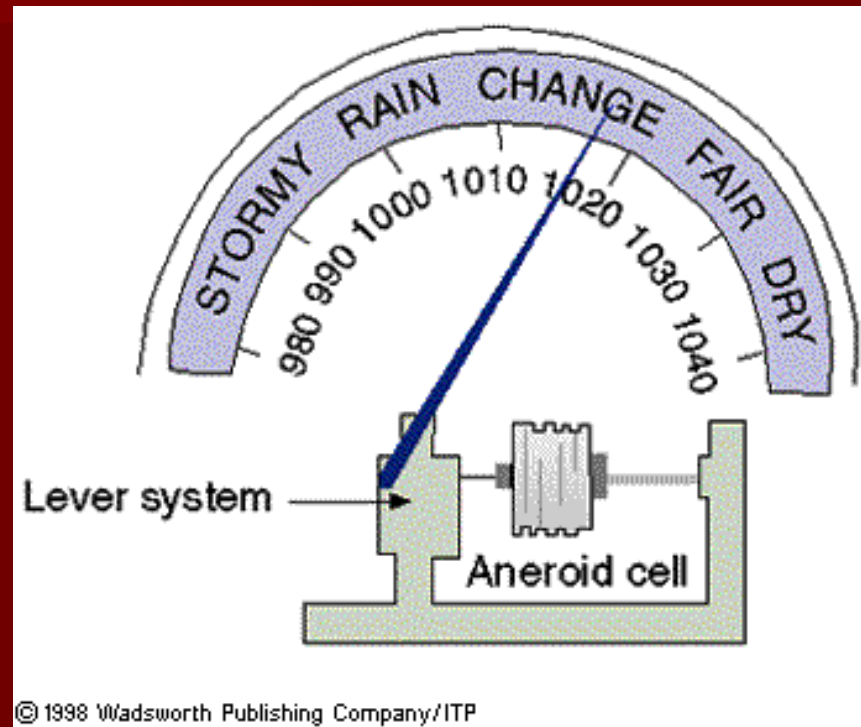
# Quiz

■ 12. \_\_\_\_\_



# Quiz

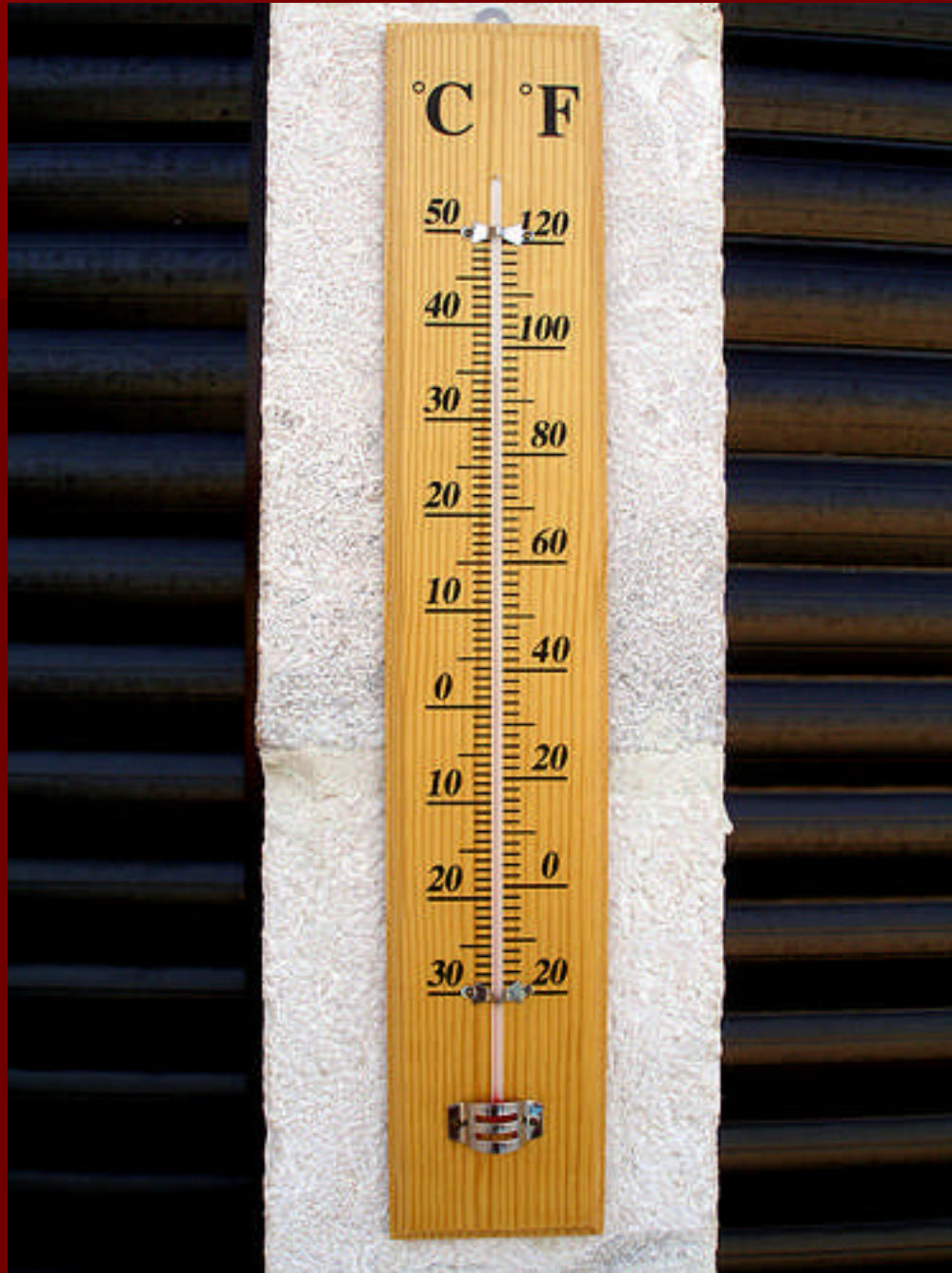
■ 13. \_\_\_\_\_





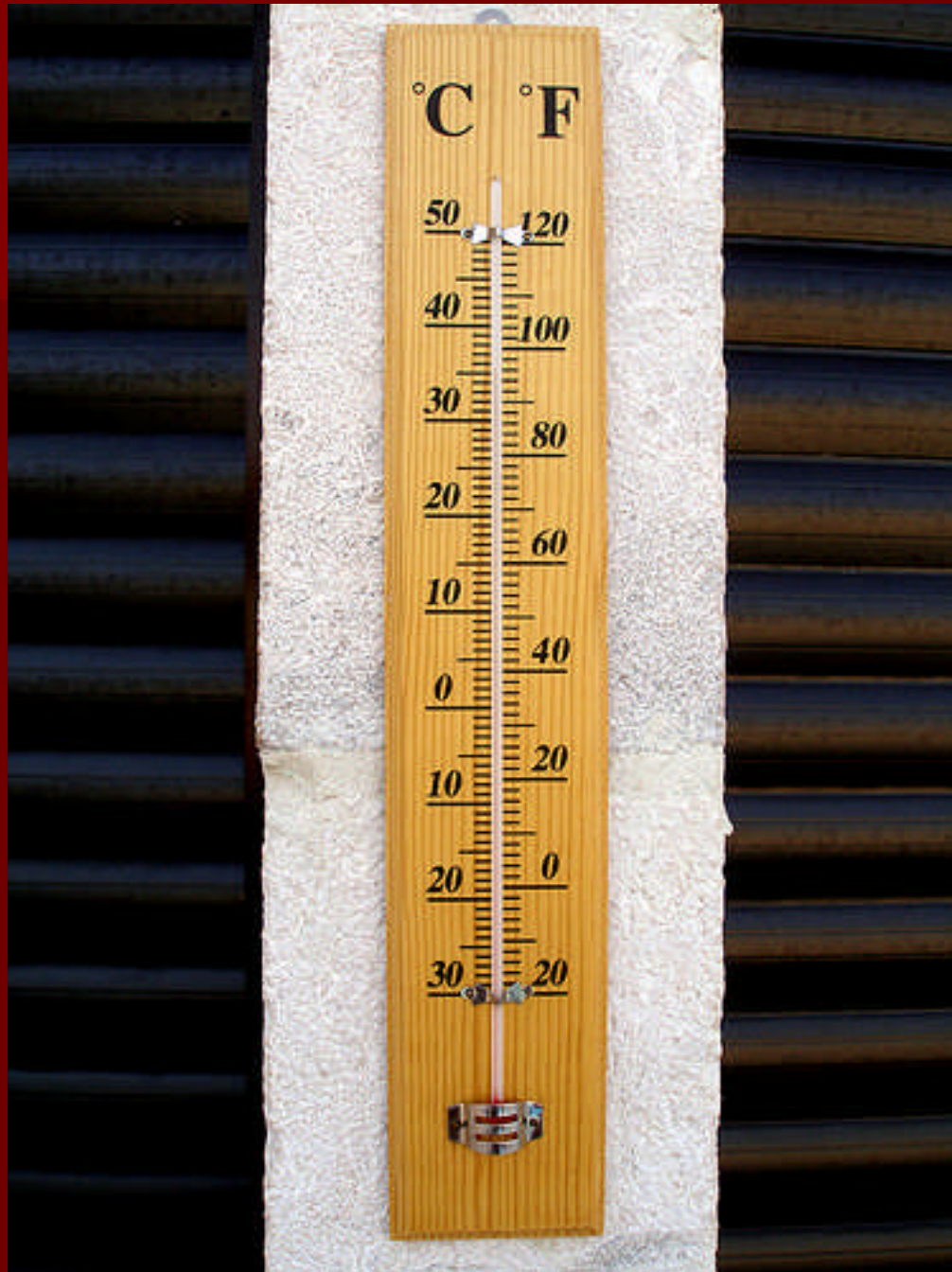
# Quiz

14. \_\_\_\_\_



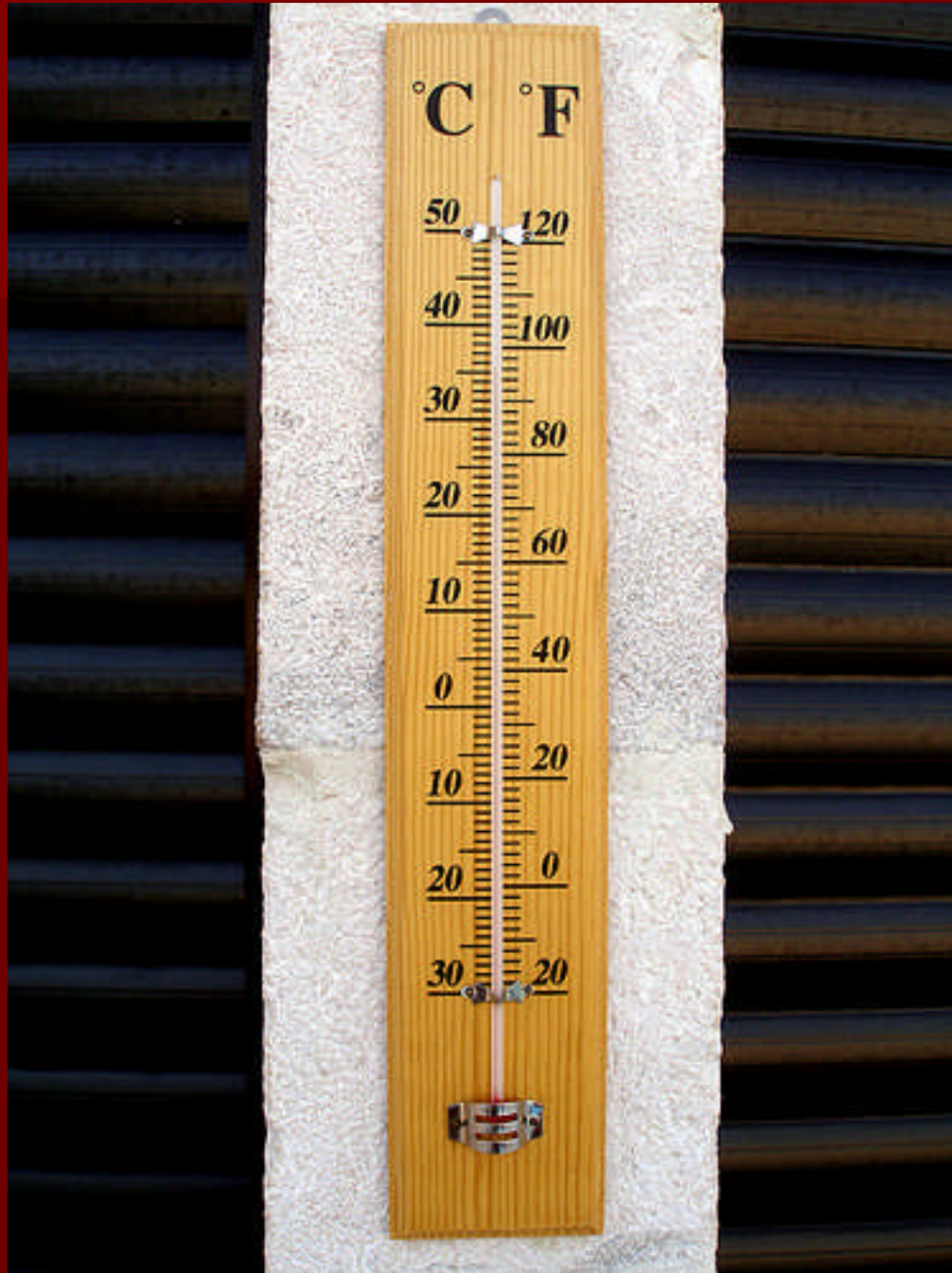
# Quiz

15. \_\_\_\_\_



# Quiz

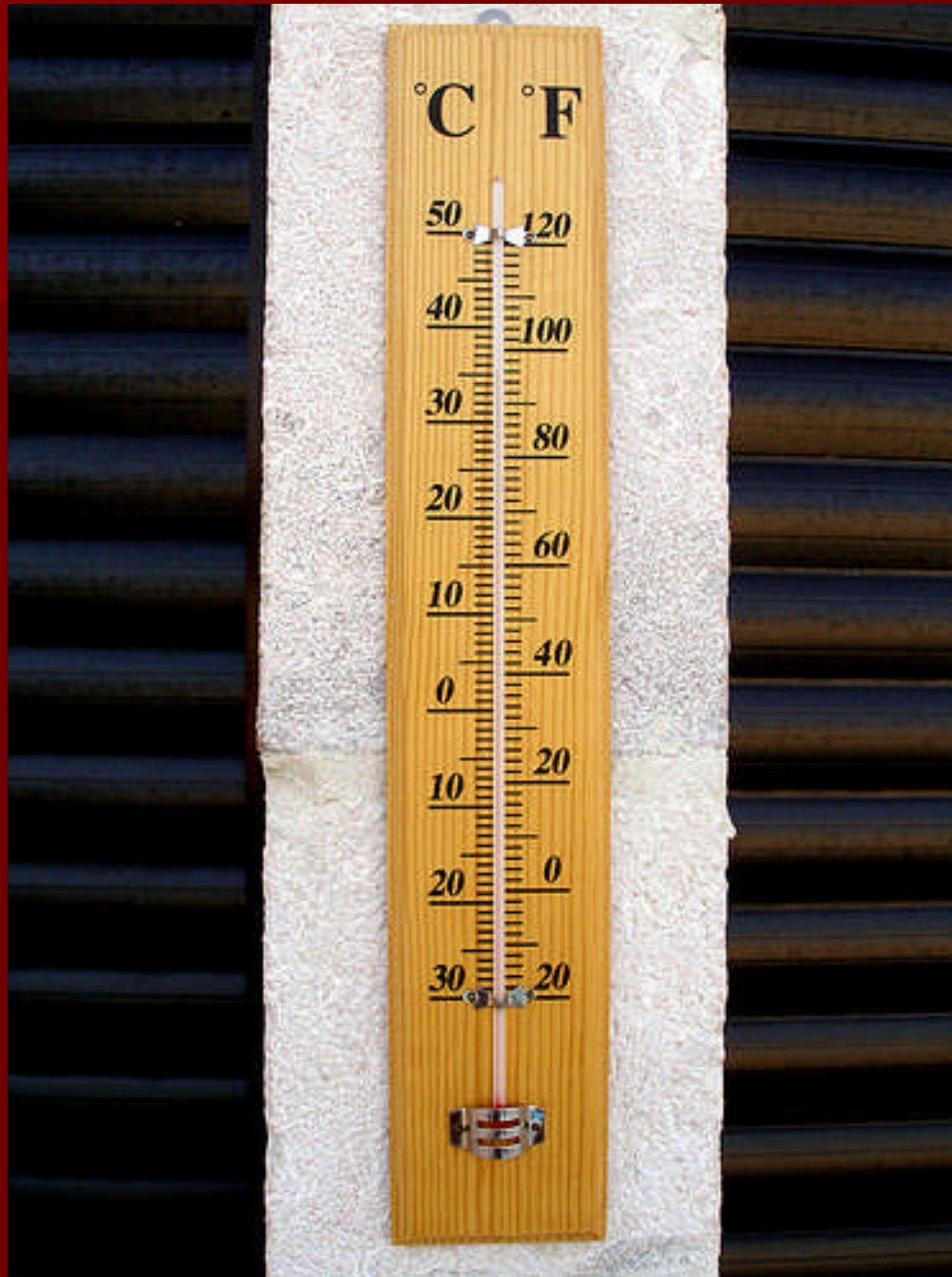
17. \_\_\_\_\_





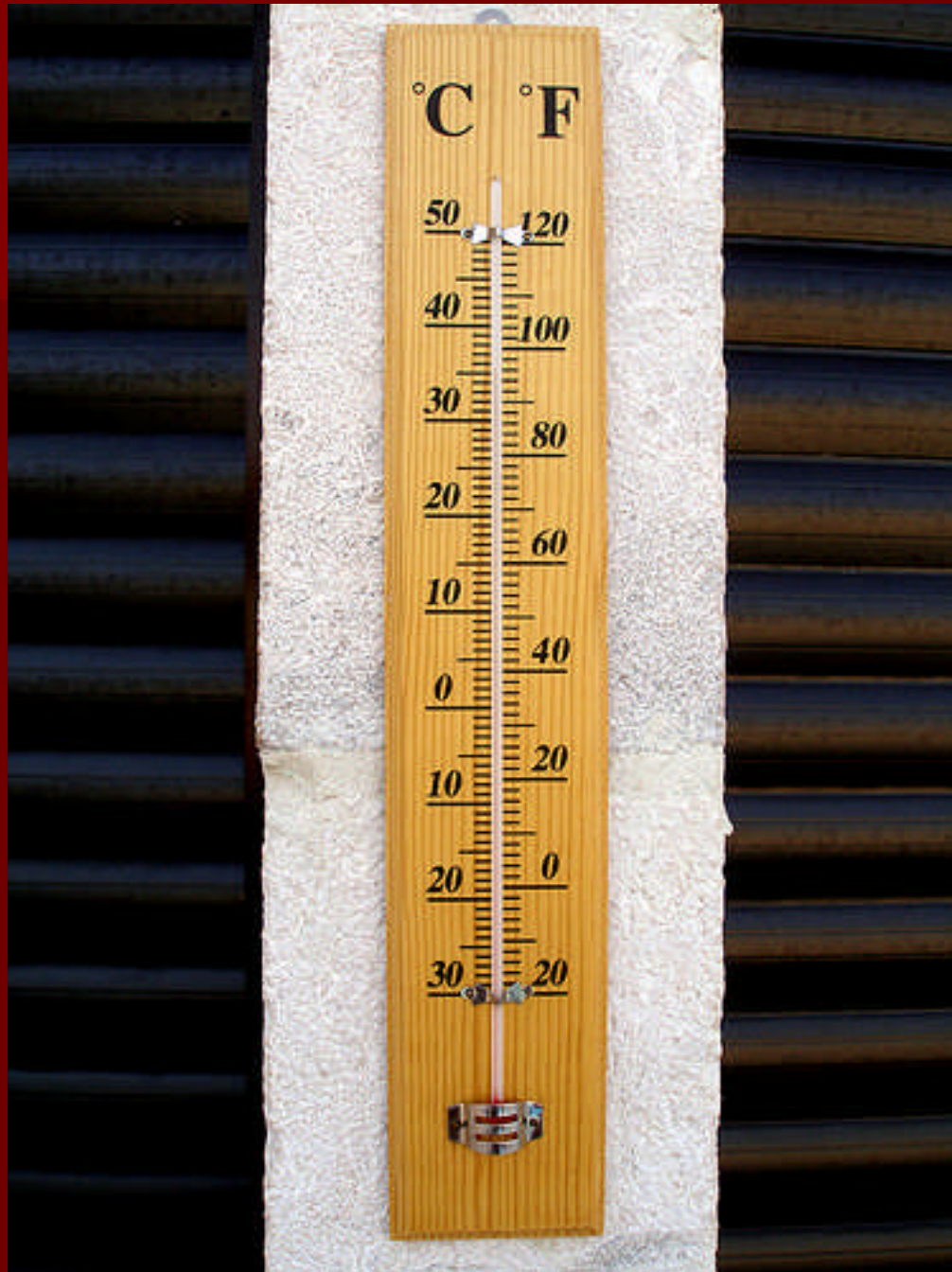
# Quiz

18. \_\_\_\_\_



# Quiz

19. \_\_\_\_\_



# Quiz

20. \_\_\_\_\_

