**TEMPERATURE:**

When we think about temp., scientists think about **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Remember… \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ made up of \_\_\_\_\_\_\_\_\_\_\_\_
  + Particles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (even if matter they make up is not moving)
  + \_\_\_\_\_\_\_particles of matter have \_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - \_\_\_\_\_\_ particles move, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have

**Temperature** – measure of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_particles in matter

**MEASURING TEMPERATURE:**

Use **\_\_\_\_\_\_\_\_\_\_\_\_\_** – liquid (mercury or alcohol sealed on inside)

* + if tube \_\_\_\_\_\_\_\_\_\_\_\_\_, particles of liquid \_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_so particles take \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + If tube \_\_\_\_\_\_\_\_\_\_\_\_, particles of liquid \_\_\_\_\_\_\_\_\_ & move \_\_\_\_\_\_\_\_\_ taking up \_\_\_\_\_\_\_\_\_\_\_\_

**THERMAL ENERGY:**

* Remember…\_\_\_\_\_\_\_\_\_\_\_\_ is the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** energy of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in an object
* Thermal energy of an object depends on…
  1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**HEAT**

* Defined as **\_\_\_\_\_\_\_\_\_\_\_\_\_** that is \_\_\_\_\_\_\_\_\_\_\_\_ from matter at a \_\_\_\_\_\_\_\_\_\_\_\_ to matter at a \_\_\_\_\_\_\_\_\_\_
  1. Example – when holding an \_\_\_\_\_\_\_\_\_\_\_\_ in your \_\_\_\_\_\_\_\_\_\_, the ice \_\_\_\_\_\_\_\_ because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is transferred \_\_\_\_\_\_\_\_\_\_\_ your hand to the ice cube

**Heat moves one way**

Materials can be either a conductor or insulator

* + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – transfer thermal energy well
    - Ex – \_\_\_\_\_\_, stainless steel, \_\_\_\_\_\_\_\_\_\_
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – do not transfer thermal energy well
    - Ex – \_\_\_\_\_\_\_\_, wool, \_\_\_\_\_\_\_\_, paper, clothes, \_\_\_\_\_\_\_\_\_

If two objects have different temps, heat will flow *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

Heat will flow from one object to the other **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Thermal\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: The \_\_\_\_\_\_\_ in which all \_\_\_\_\_\_\_\_\_\_ are at the same \_\_\_\_\_\_\_\_\_\_\_\_\_

Have you ever loosened a tight jar lid by holding it under a stream of hot water? Why does this work?

As the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of matter \_\_\_\_\_\_\_\_\_\_, its particles \_\_\_\_\_\_\_\_\_\_ and the substance \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The expanding of matter when it is heated is called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

When matter \_\_\_\_\_\_\_\_\_\_\_\_, thermal energy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Particles slow down and move closer together

As cools, matter \_\_\_\_\_\_\_\_\_\_\_\_\_ (decreases in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)