**Properties of Water Notes Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

What is the chemical formula for water? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- The most important molecule to living things.

Water is a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** molecule

* This results in a water molecule with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ end and a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ end.
* **Draw a molecule of water:**

Because water is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ many substances.

* Water is considered the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, meaning it can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Solubility** - the measure of how much \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at a given temperature.

* Example:
  + Remember, the sugar dissolves faster in \_\_\_\_\_\_ water than in \_\_\_\_\_\_ water.
  + As the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_increases, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_increases.

Because water is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_it has these properties…

**Cohesion** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Example:

**Surface tension**- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Example:

**Adhesion** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Example:

**Capillary Action** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Example:

**Specific Heat** - The amount of heat needed to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the temperature by 1 degree Celsius.

Water has a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** Specific Heat!

It takes **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** to raise the temperature of water.

Example:

It’s a hot day! The sidewalk is hot, the sandy beach is hot. So, you decide to go to the beach. When you jump in the ocean, the water is surprisingly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!

*Why???* Because it takes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to warm the \_\_\_\_\_\_\_\_\_\_ then the sidewalk, beach and air!

**Why does water have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ specific heat?**

It’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!! The molecules are SO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to each other that it takes A LOT of heat to break the molecules apart.