**Effect of Temperature on Matter Notes**

Solids:

Particles are arranged \_\_\_\_\_\_\_\_\_\_\_\_\_\_, in a very tight, fixed pattern.

Liquids:

Particles are close, but loose fitting. They are able to \_\_\_\_\_\_\_\_\_\_\_\_ past each other.

Gases:

Particles are spread \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, in no particular pattern

**Although the table you are sitting at doesn’t look like it’s moving, the particles inside of it are.**

Solids: The particles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and can’t move \_\_\_\_\_\_\_\_\_\_\_\_\_, so they stay in one place & vibrate

Liquids: The particles are held together, but not very \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
 The particles tend to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Gases: The particles are not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at all**,** & move \_\_\_\_\_\_\_\_\_ in all directions.

**Draw what the particles look like inside…**

|  |  |  |
| --- | --- | --- |
| Solids | Liquids | Gases |
|  |  |  |

**How does the temperature of matter affect the particles of matter?**

As the temperature increases, the particles begin to move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

As the temperature decreases, the particles will move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**How do these particles affect matter?**
The movement of the particles affects the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the matter.

As the particles vibrate/move \_\_\_\_\_\_\_\_\_\_, the bonds are not strong enough to hold them together.

As the particles move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, it is easier for the bonds to hold them together.

**How does matter change state?**

When solid particles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ too fast, they break loose and begin to move around. This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and changes the solid to a \_\_\_\_\_\_\_\_.
When liquid particles begin to move \_\_\_\_\_\_\_\_\_\_\_\_, they break free from the others and fly away. This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and is when a liquid becomes a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.