Matter Review Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write out the definitions for the following terms:

1. States of matter –
2. Viscosity –
3. Condensation –
4. Melting –
5. Sublimation –
6. Freezing –
7. Evaporation –
8. Deposition –
9. Surface tension –

Fill out the table below describing the particle spacing, volume, shape, and speed of the particles for each state of matter.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| State of Matter | Particle Spacing | Volume  (can or can’t change?) | Shape  (will or won’t change with container?) | Particle Speed |
| Gas |  |  |  |  |
| Liquid |  |  |  |  |
| Solid |  |  |  |  |

1. Name 3 things that affect how gases behave: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. If I decrease the temperature of a gas, what happens to the volume? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Which Law deals with temperature and volume? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. If I increase the volume of the container, what happens to the pressure inside it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Which Law deals with volume and pressure? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Describe the difference between a crystalline and amorphous solid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. For each change in state of matter, tell whether energy was added or removed:
   1. Melting = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Condensation = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Sublimation = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ e. Freezing = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Deposition = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ f. Evaporation = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What are the correct temperatures for WATER in ̊C?

|  |  |  |  |
| --- | --- | --- | --- |
| Boiling Point | Melting Point | Freezing Point | Condensation Point |
|  |  |  |  |

1. State whether each example is a solid, liquid, gas, or plasma.
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pencil
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lightning
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ syrup
   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kool aid
   5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bread
   6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ steam
2. What will happen if you take a balloon outside on a very hot day? Why does this happen?