Matter Review Sheet

1. Know some properties of matter and be able to match them to a definition
2. Which properties are intensive? Extensive?
3. Density is an intensive property. Be able to calculate the density of a substance D=m/v

Make sure you can show your work and that you know the units to use. You may also need to calculate the volume using displacement of water (mL) or by multiplying the length, width, and height of a geometric figure (cm3)

1. Be able to describe the properties of solids, liquids, and gases
2. How do intermolecular forces affect each state of matter?
3. Kinetic energy is the energy of movement. Which state moves the fastest? Slowest?
4. What is the Kinetic Molecular Theory?
5. An increase in temperature causes an increase in kinetic energy and can cause increased pressure on a container that is holding a gas
6. What is Charles’s Law? Boyle’s Law? Be able to use their laws hypothetically and to do some math problems involving gas temperature, volume, and pressure.
7. Be able to convert temperature in Celsius into kelvins (k) – You must use k for math problems!
8. Differentiate between graphs showing direct relationships and inverse relationships
9. Be able to indentify/describe each of the phase changes (i.e. melting, freezing, sublimation etc.)
10. Be able to label a phase change graph (where on the graph does the temperature stay constant? What is happening in these “flat” areas?)
11. Differentiate between endothermic and exothermic reactions and give examples of each
12. What is the Law of Conservation of Matter?
13. Discuss what can be evidence of a chemical change
14. Differentiate between physical and chemical changes