

It Really Does Matter Worksheet

1. List the three basic parts of an atom, *along with their charges*.

a.

b.

c.

2. Define molecule. *Give three examples of specific molecules.*

Definition -

a.

b.

c.

3. Identify two problems with our model of the atom.

a.

b.

4. Explain what the following people did to expand our knowledge about atoms.

a. Democritus -

b. John Dalton -

c. Sir J. Joseph Thomson -

d. Niels Bohr -

e. James Chadwick -

f. Werner Heisenberg -

g. Ernest Rutherford -

5. Define matter.

6. List the three states (phases) of matter.

a.

b.

c.

7. List two properties of a solid.

a.

b.

8. List two properties of a liquid.

a.

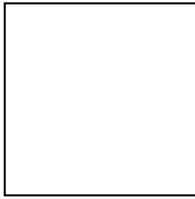
b.

9. List two properties of a gas.

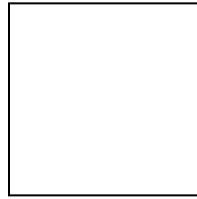
a.

b.

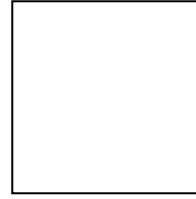
10. In the boxes below, *draw a picture showing the particles* in a solid, liquid, and gas.



Solid



Liquid



Gas

11. Describe the motion of the particles in a solid, liquid, and gas.

a. Solid -

b. Liquid -

c. Gas -

13. Describe what happens to the motion of the particles in a block of ice as it melts and boils.

a. Motion of particles as it begins to melt -

b. Motion of particles when it finishes melting -

c. Motion of particles as it begins to boil -

d. Motion of particles when it is boiling -

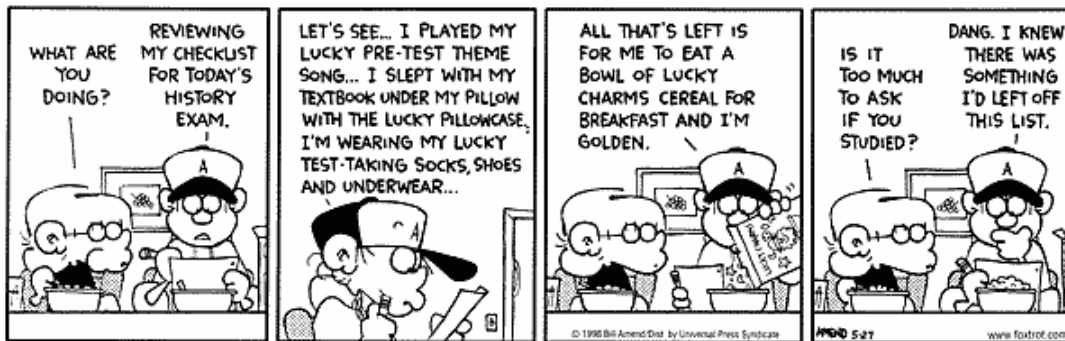
14. Define diffusion.

15. Give three examples of diffusion that occur in our school.

a.

b.

c.

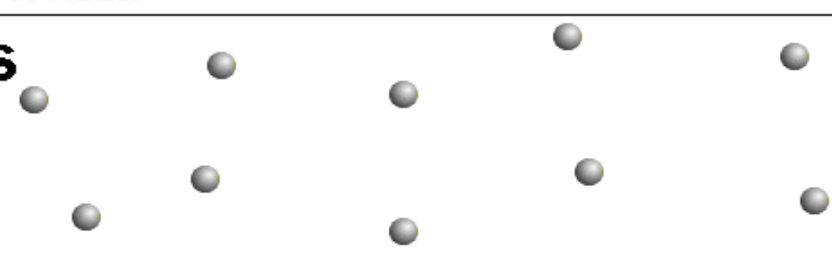


16. Complete the chart.

Phases of Matter

Temperature or Energy

Gas




The gaseous phase of water is called _____

Another example of a gas is _____

When a gas cools and condenses, it becomes a _____

Liquid



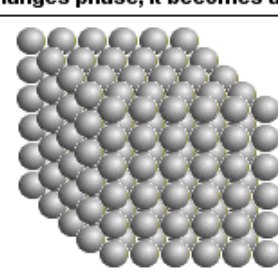
The liquid phase of water is called _____

Another example of a liquid is _____

When you heat a liquid and it changes phase, it becomes a _____

When you cool a liquid and it changes phase, it becomes a _____

Solid



The solid phase of water is called _____

Another example of a solid is _____

When you heat a solid and it melts, it becomes a _____