

COMBUSTION

L5: Feel the Energy Move

Guiding Question: What are the key elements of a good model?

- **Do Now:**

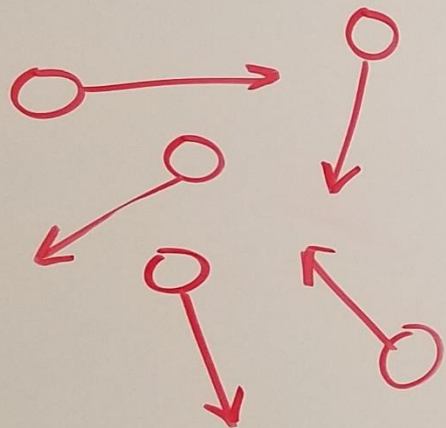
- What is all matter composed of? Draw a picture of it in addition to writing it down with words.

Guiding Question: What are the key elements of a good model?

Do Now

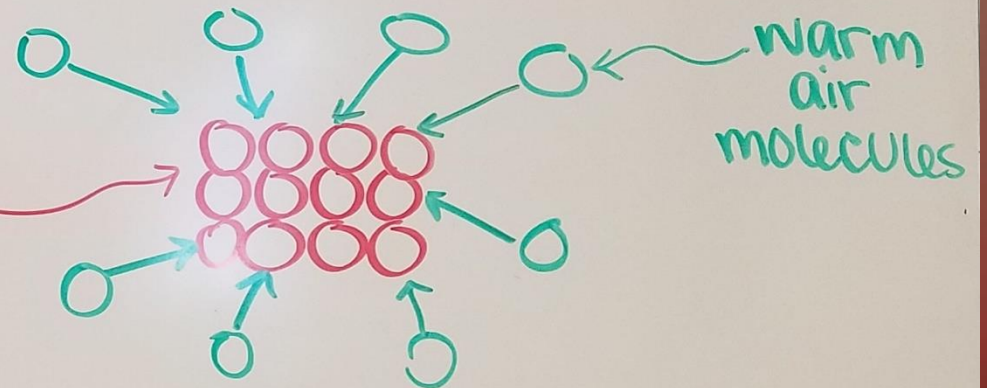
Make sure you have these two examples on p.5. Turn to p.2 for notes

RULE #4

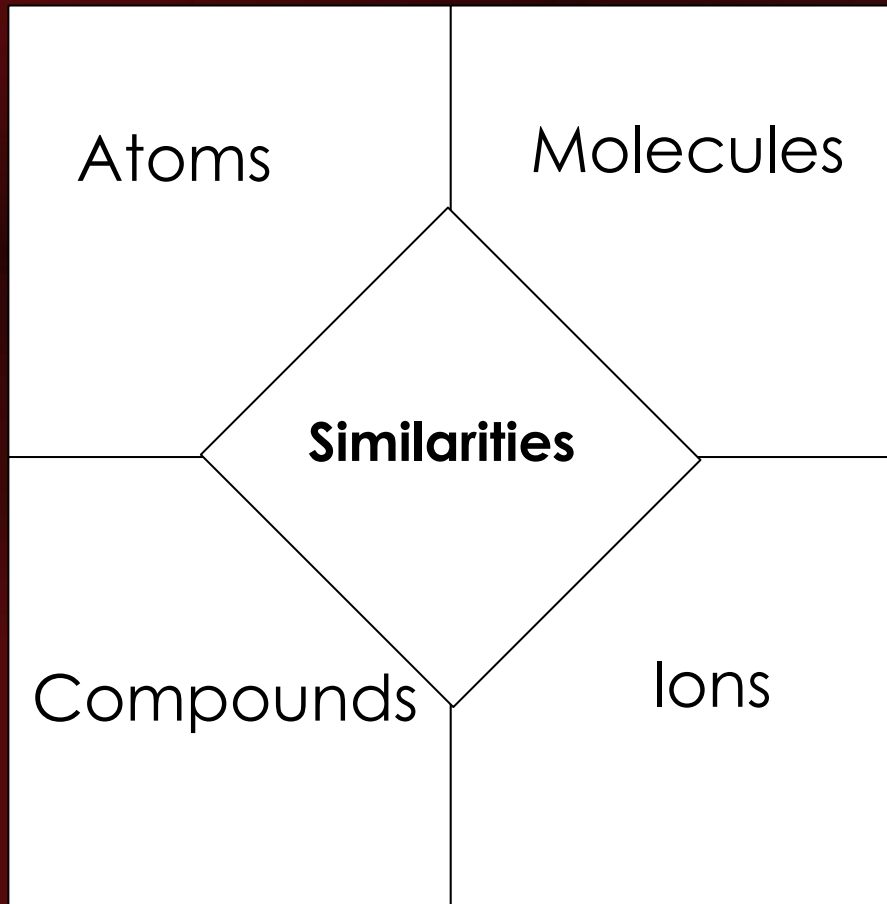


RULE #5

cold solid



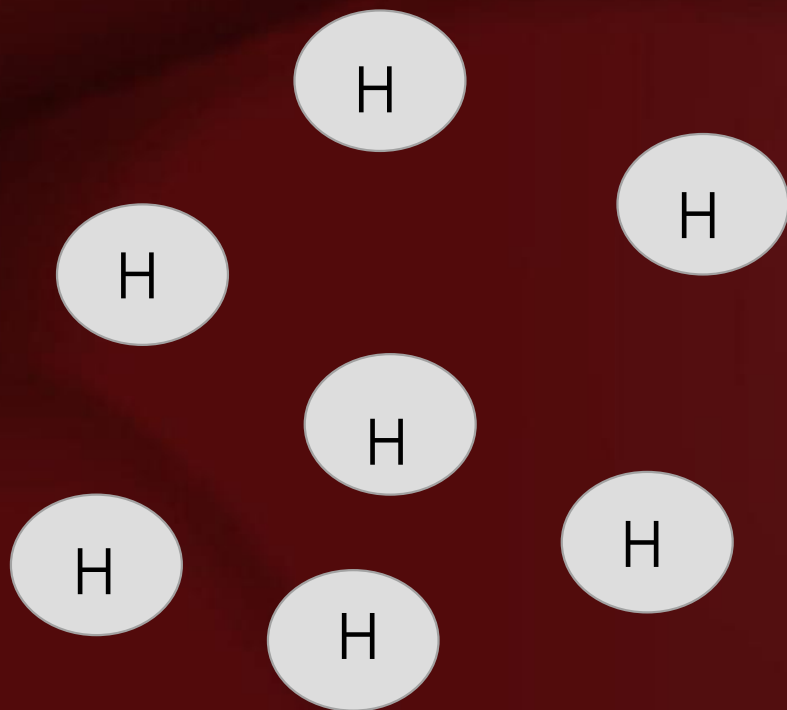
#5 FEEL THE ENERGY MOVE



Directions:

1. With your table, you will research -USING YOUR CELL PHONE- what an Atom, Molecule, Compound and Ion are.
2. In the diagram, you will draw a model and write a few sentences about what you learn from you research.
3. **MAKE SURE TO SAVE ROOM FOR NOTES FROM MS. WILSON**
4. In the middle box, you will compare all 4 different particles.

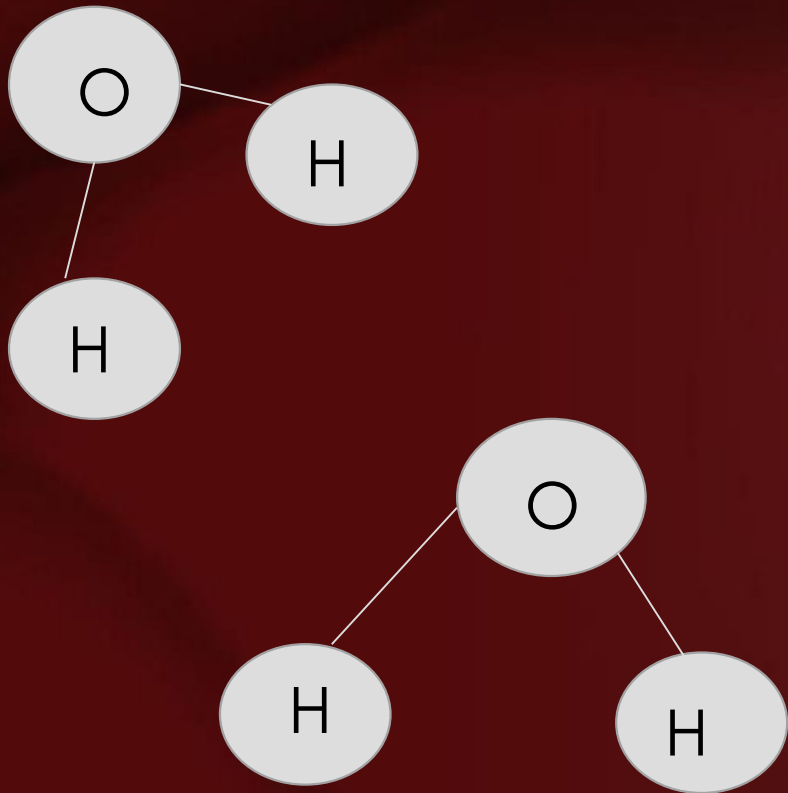
ATOMS



Atoms are the BASIC unit of a chemical element.

In particle models, we draw atoms as single dots or circles.

MOLECULES



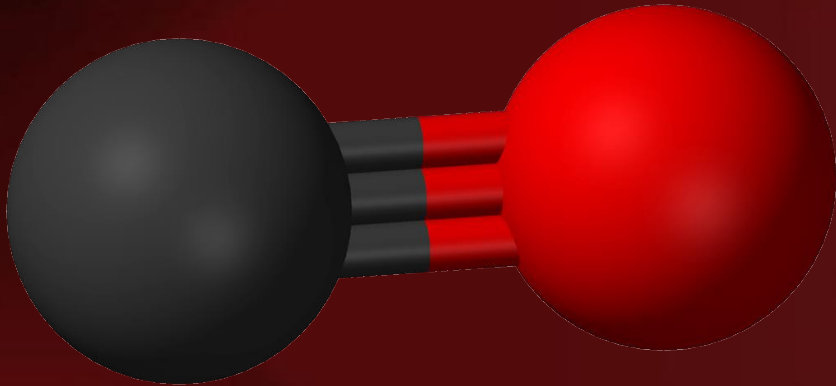
Molecules are a GROUP of atoms bonded together.

In particle models, we draw atoms as single dots or circles and connect them together using a line.

COMPOUNDS

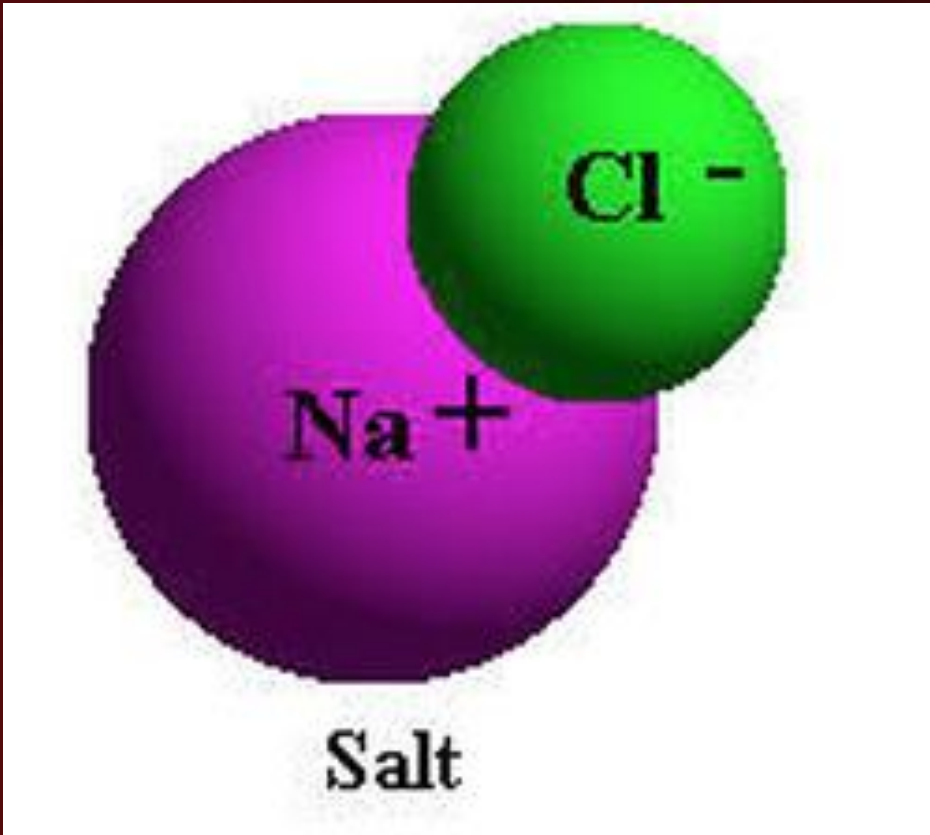
Composed of TWO or more separate elements

In particle models, we draw atoms as single dots or circles and connect them together using a line.



You **MUST** use two different colors to show the different elements.

IONS



An atom or molecule with a net electric charge due to the loss or gain of one or more electrons

You **MUST** draw a plus or minus to represent the charge. We will learn how to determine charge later this unit.

PAGE 4-6

Directions:

1. On your own, try to figure out the accurate way to draw each example for the given scenarios.
2. You will have 20-25 minutes to complete all drawings. Remember- you have notes on how to draw Atoms, Molecules, Compounds, and Ions.
3. Once the time is up, you will share your drawings with your group and discuss what you liked about each drawing and how to improve.

NOTES

Rule 1: All matter is made of particles. These are also called atoms, molecules, compounds, or ions.

Rule 2: We draw them using dots and shade them differently (or use different colors) if they are different particles.

Rule 3: We draw solids, liquids, and gases differently because they each have different amounts of space between particles

NOTES

Rule 4: We use arrows to indicate direction and strength of movement (magnitude) of a particle. These are called vectors.

Rule 5: We can show energy transfer by drawing arrows (larger than moving arrows) from one region to another, or one particle to another.

NOTES

Remember: A good model is...

- Labeled
- Has arrows
- Detailed

HOMEWORK

Homework #2 due Friday, 9/1