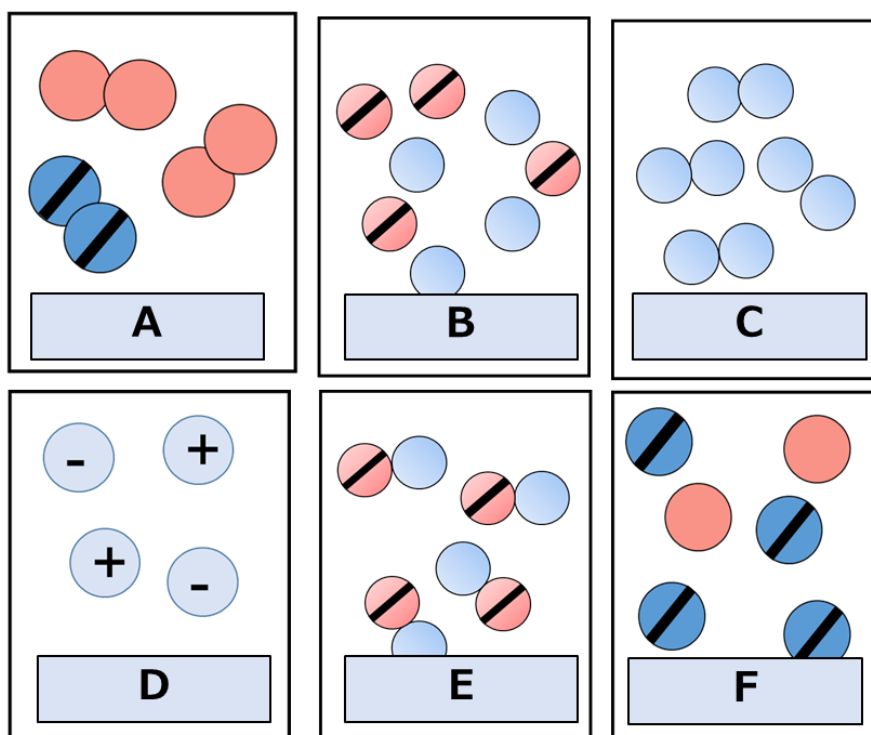


Matter can exist in different arrangements: Mixtures, compounds and elements. These arrangements can consist of different particles: Atoms, ions or molecules.

1. Match the following definitions to these **bolded terms** above











Definition	Term
Two or more particles joined together	
Combinations of two or more different elements that are chemically joined together.	
combinations elements and/or compounds not chemically joined together.	
The smallest <u>neutral</u> particle that matter can be broken down to.	
Charged particles formed from atoms that can be positive or negative.	
Substances made up of only one type of atom/particle.	

2. Match the terms to the correct particle diagram (some terms may require more than one diagram)



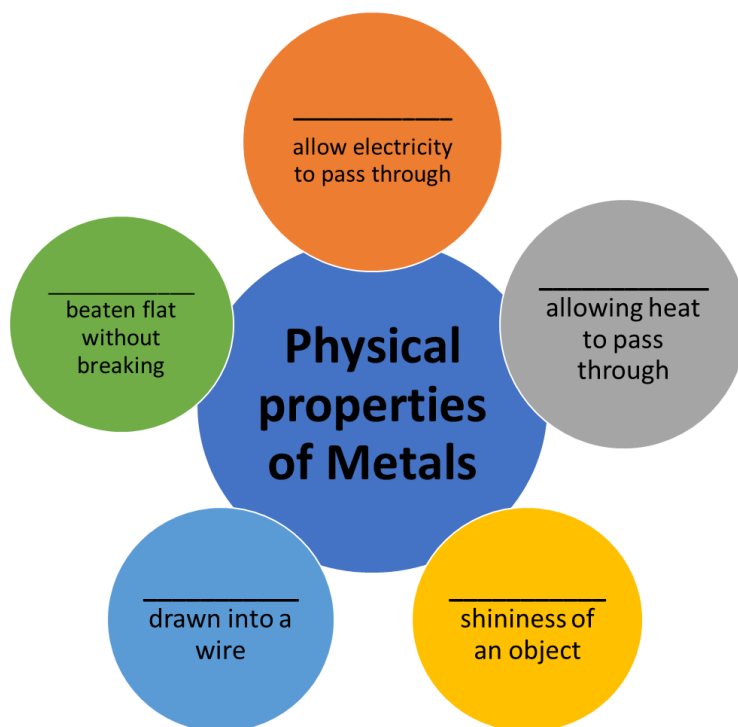
Term	Particle diagram (s)
Mixture	
Compound	
element	
atom	
ion	
molecule	

3. Many of the common types of elements are grouped in the first 20 elements out of 130+ elements in a periodic table.

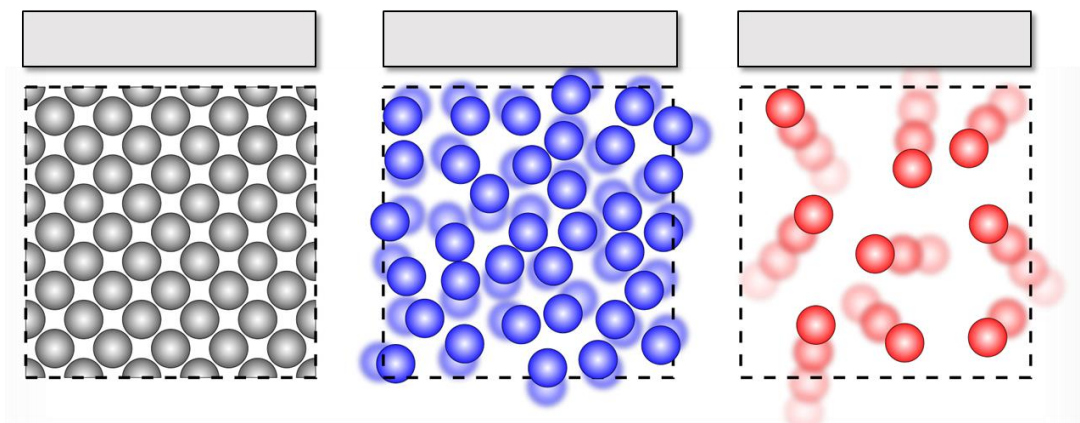
HYDROGEN 1 <b>H</b> 1.01							HELIUM 2 
LITHIUM 3 	BERYLLIUM 4 <b>Be</b> 9.01	BORON 5 <b>B</b> 10.81	CARBON 6 	NITROGEN 7 <b>N</b> 14.01	OXYGEN 8 <b>O</b> 16.00	FLUORINE 9 	NEON 10 
SODIUM 11 	MAGNESIUM 12 <b>Mg</b> 24.31	ALUMINUM 13 	SILICON 14 <b>Si</b> 28.09	PHOSPHORUS 15 	SULFUR 16 	CHLORINE 17 <b>Cl</b> 35.45	ARGON 18 <b>Ar</b> 39.95
POTASSIUM 19 	CALCIUM 20 <b>Ca</b> 40.08						

- a. Complete the missing symbols in the Periodic table above
- b. Name any four elements from the above table that are considered metals


4. Complete the diagram and match the FIVE physical properties of metals: Ductility, Electrical conductivity, Lustre, heat conductivity, malleability



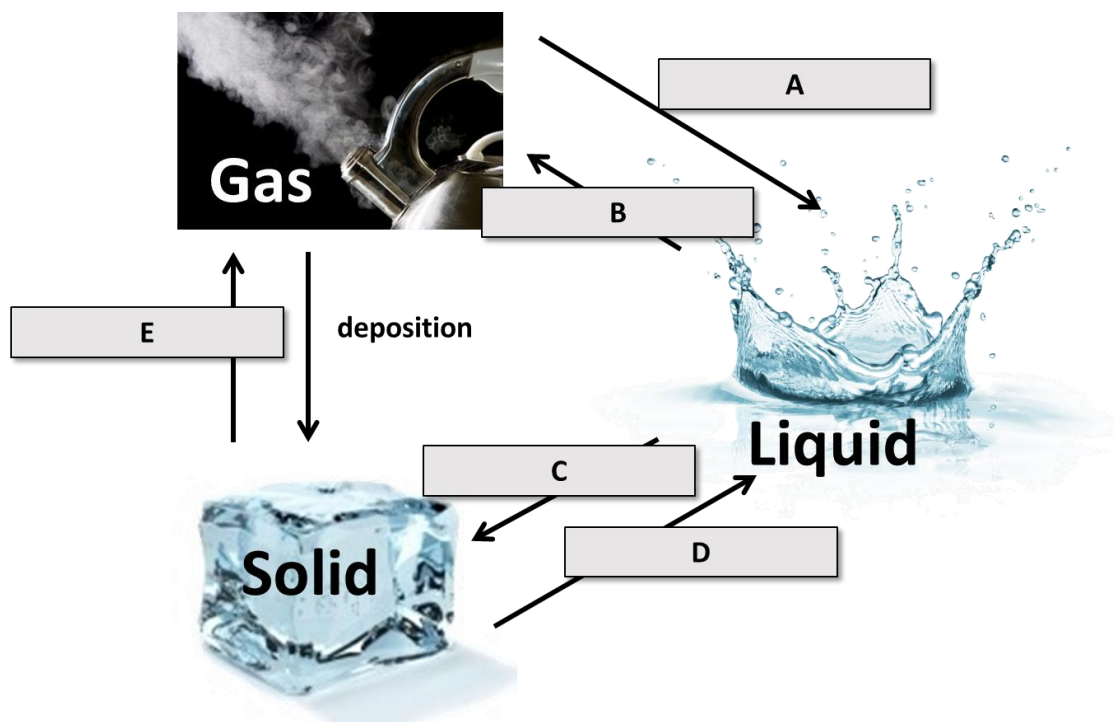
5. Copper can often be used for electrical wiring. Explain how TWO physical properties make it useful for wires.
6. Complete the labels on the following particle diagrams of STATES



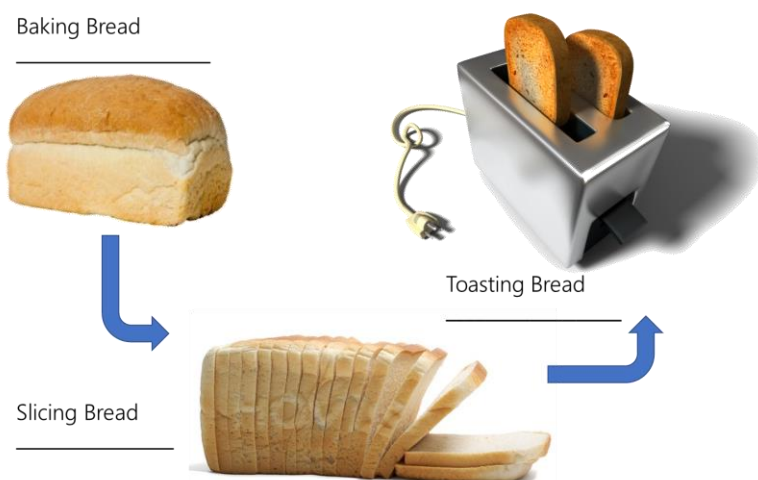
7. Referring to the diagrams EXPLAIN how the two properties are different between the three states

Properties	How are they different between the states
Space	
Movement	

8. Substances can change from one state to another. Complete the changes of state



9. During the process of baking, cutting and toasting, bread undergoes both physical and chemical change



- Identify each step as either physical or chemical change
- List THREE observations you might see to indicate a chemical change
- Bread is mainly made out of flour, water, yeast.
  - What are the reactants?
  - What are the products?
  - Write this as a WORD equation