

1) Match the words and the definitions.

a pure substance an atom an element a molecule a compound

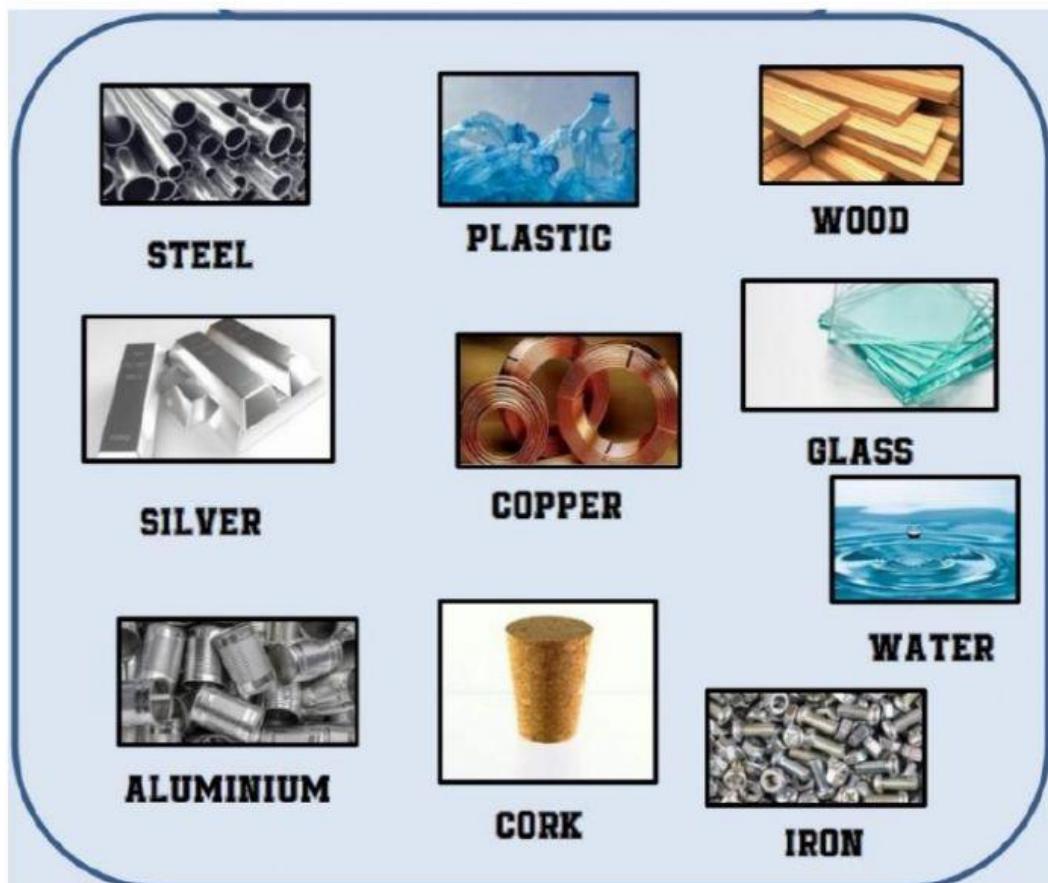
1. This is the smallest particle of matter. It's _____.
2. This is formed by two or more different atoms. It's _____.
3. This is a substance made of one type of atom. It's _____.
4. This is a substance made of one type of molecule. It's _____.
5. These are elements and compounds. It's _____.

2) Now classify the following words:

Fe CO₂ Gold water vinegar

Atom	Molecule	Pure substance element	Pure substance compound	Mixture

3) Write conductor or insulator.



4 Complete the paragraph.

can can't insulator conductor slowly fast heat move

Molecules in matter always _____. At low temperatures they move _____ and at high temperatures they move _____. We feel this movement as _____.

In metal the molecules _____ move a lot. Metal gets very hot. It's a thermal _____.

In plastic the molecules _____ move a lot. Plastic doesn't get hot. It's a thermal _____.

5 Match and write the sentences in your notebook.

a) Two or more different atoms...	1. the molecules can move about.
b) A pure substance has...	2. join together to make a molecule.
c) In a thermal conductor...	3. new molecules are formed.
d) In a solution different molecules from...	4. only one type of atom or molecule.
e) In a chemical change...	5. the solvent and the solute mix together.

6  Choose the correct answer.

a) Which are pure substances? 1. elements and compounds 2. atoms and molecules 3. elements and mixtures.	c) Which is the solute in hot chocolate? 1. milk 2. chocolate 3. water.
b) Which are thermal insulators? 1. wood and metal 2. glass and plastic 3. wood and plastic.	d) Which are physical changes? 1. changing place and state 2. burning and rusting 3. changing temperature and burning.
e) Which is the property of a ceramic pot? 1. Elastic. 2. Fragile. 3. Tough	g) Which is the property of a golden ring? 1. Soft 2. Tough 3. Fragile
f) Which is the property of a rubber band? 1. Hard. 2. Elastic. 3. Plastic	h) Which is the property of a book? 1. Plastic 2. Hard 3. Elastic

7 **Think!** Write *homogeneous* or *heterogeneous* under each mixture.



8 **Think!** Identify the solute and solvent in each of these solutions.

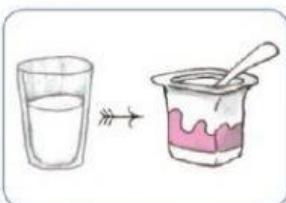
Solution	Solute	Solvent
strawberry milkshake		
salt water		
sweet tea		
chocolate yogurt		
lemon sorbet		

9) Read and identify the types of change: physical or chemical.

Their molecules move about but their structure doesn't change. The substance is the same.

New molecules are made and the matter is changed forever.

10 **Think!** Write under each change *physical* or *chemical*.



Milk changes into yogurt.



A piece of fruit rots.



Milk is warmed for a baby.



A comb falls on the floor.



A can rusts.



A piece of wood burns.