Name: Date: Score: / 8

Element, Compound, Mixture: Learn and Practice

Sort matter by what it is made of

Read each question. Circle the best answer.

💡 Elements, Compounds and Mixtures

- An element has only one kind of atom, like gold or oxygen.
- A compound has two or more elements chemically joined in a fixed ratio, like water.
- A mixture combines substances that are not chemically joined and can be separated physically.
- salt water: boil off the water: mixture separated

1 🥗 Which of these is a mixture?

A. Iron B. Pure water C. Salad D. Carbon

2 Table salt is sodium and chlorine chemically joined. What is it?

A. An element B. A compound C. A mixture D. An atom

3 What is an element made of?

A. Only water molecules
B. Two kinds of atoms joined
C. Only one kind of atom
D. Several mixed substances

4 Which of these is an element?

A. Oxygen B. Water C. Salt water D. Air

5 Air has nitrogen, oxygen and other gases that are not joined together. What is air?

A. An element B. A compound C. A mixture D. A metal

6 🧲 How could you separate iron filings from sand?

A. Use a magnet B. Shake it in a bag C. Burn it D. Add water and freeze it

7 💧 Which of these is a compound?

A. A fruit salad B. Gold C. Air D. Water

8 Can the parts of a mixture be separated by physical means?

A. Only by burning B. Only by a reaction C. No, never D. Yes, like filtering or sieving

✏️ Explain it! Write two facts you learned about element, compound, mixture.

ANSWER KEY

Element, Compound, Mixture: Learn and Practice (answers)

Sort matter by what it is made of

Read each question. Circle the best answer.

1 Which of these is a mixture?

A. Iron B. Pure water **C. Salad** D. Carbon

A salad is lots of foods mixed but not joined, so it is a mixture.

2 Table salt is sodium and chlorine chemically joined. What is it?

A. An element **B. A compound** C. A mixture D. An atom

Two elements chemically joined in a fixed ratio make a compound.

3 What is an element made of?

A. Only water molecules

B. Two kinds of atoms joined

C. Only one kind of atom

D. Several mixed substances

An element is the simplest pure substance, with just one kind of atom.

4 Which of these is an element?

A. Oxygen B. Water C. Salt water D. Air

Oxygen is made of only one kind of atom, so it is an element.

5 Air has nitrogen, oxygen and other gases that are not joined together. What is air?

A. An element B. A compound **C. A mixture** D. A metal

The gases in air are just mixed, so air is a mixture.

6 How could you separate iron filings from sand?

A. Use a magnet B. Shake it in a bag C. Burn it D. Add water and freeze it

Iron is attracted to magnets but sand is not, so a magnet pulls the iron out.

7 Which of these is a compound?

A. A fruit salad B. Gold C. Air **D. Water**

Water is hydrogen and oxygen chemically joined, so it is a compound.

8 Can the parts of a mixture be separated by physical means?

A. Only by burning B. Only by a reaction C. No, never **D. Yes, like filtering or sieving**

Mixture parts are not chemically joined, so physical methods can pull them apart.