

Reading activity

H/L for 7S reading comprehension and will be due on Friday 18th January.

Atoms may form molecules. A molecule consists of two or more atoms joined together.

If atoms are of the same element, they form molecules of the element. If atoms of two or more elements are joined together by chemical bonds, they form molecules of a compound.

During a chemical reaction a new molecular substance is made. These new elements are products of the reaction. The starting chemicals are called reactants. The products can have very different properties from the reactants.

A compound has a fixed composition. Iron sulphide (FeS) contains one atom of iron and one atom of sulphur joined together.

Chemical reactions can take place between elements and compounds. There are three things to look out for to show that a chemical reaction is occurring.

Temperature change – most chemical reactions give out heat energy, so we can measure an increase in temperature.

Gas produced – bubbles show that gas is being produced. If a reaction is carried out in a beaker placed on a mass balance, then the mass of the beaker will go down as the gas produced (which has mass) escapes into the air.

Colour change.

Read the text above and answer the questions below using full sentences.

1. Name three signs of a chemical reaction.
2. Why might the mass go down during some reactions?
3. What are the chemicals called at the start and end of a reaction?
4. What does having a fixed composition mean?
5. What is a molecule?
6. What does molecule of a compound mean?
7. What does molecule of an element mean?
8. Are the properties of reactants and products the same?