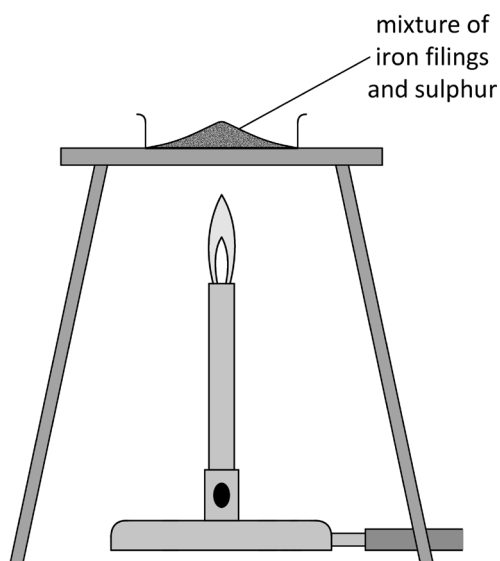


Name:

Class:



A teacher mixed iron filings with sulfur on a metal tray. She heated the mixture in a fume cupboard. Sulfur is yellow. Iron filings are grey.



The mixture glowed very brightly. The teacher turned off the Bunsen burner. The glow spread through the mixture. When the mixture cooled, a black solid called iron sulfide was left.

- i. From this information, give one way you can tell that a chemical reaction took place?

The mixture glowed

- ii. What type of substance is each of the chemicals involved in this reaction? Choose from:

**metallic
element**

mixture

**non-metallic
element**

compound

Iron: **metallic element**. Sulfur: **non-metallic element**. Iron sulfide: **compound**.

Give the formula of a molecule of ammonia.

NH₃

Give the formula of a molecule of chlorine.

Cl₂

What is an acid?

A substance that reacts with alkalis and bases and has a pH less than 7 that reacts with a base to form a salt and water.

Some fossil fuels contain sulfur. When fuels burn, sulfur reacts with oxygen. Complete the word equation for this reaction.

sulfur + oxygen → **sulfur dioxide/ allow sulfur oxide.**

The chemical reaction shown below, is an example of:



Circle the correct answer to complete the sentence.

combustion

displacement

decomposition

reduction