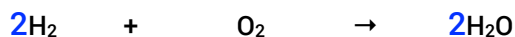


0 1 . 1

Hydrogen and oxygen react to produce water.

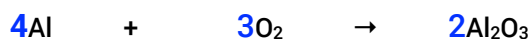
Balance the symbol equation below which represents this reaction. [1 mark]



0 1 . 2

Metals can react with oxygen in the air to produce metal oxides. The reaction below represents one of these reactions.

Balance the symbol equation below which represents this reaction. [1 mark]



0 2 . 1

Sodium and water react to produce sodium hydroxide and hydrogen gas. The word and balanced symbol equations below show the reaction.

sodium + water → sodium hydroxide + hydrogen



Why is a balanced symbol equation better at describing the reaction than a word equation? [2 marks]

Tells you the number of atoms reacting [1]

Shows no atoms are lost or gained

OR

number of atoms are the same on both sides [1]

0 2 . 2

For the above reaction, the total mass of the sodium and water that reacted was 84 grams. The mass of the hydrogen produced was 4 grams.

What is the mass of the sodium hydroxide produced. [2 marks]

84 - 4 [1]

Mass of sodium hydroxide = 80 grams [2]

Explain your answer. [2 marks]

No atoms are lost or made [1]

Mass of the products must equal mass of the reactants [1]

(Total 8 marks)

End

TOP TIP :
Full marks for the correct answer, even without working.
1 mark for the correct working.