Workbook/ answer key

10.3 The reactions of metals with acids

1a copper and gold

b magnesium

c magnesium, zinc, iron, copper/gold

2a Place a lit splint into the gas. If the splint goes out and makes a squeaky pop, the gas is hydrogen.

b **i** hydrogen

ii [redacted] zinc sulfate

iii hydrochloric acid, hydrogen

iv zinc, hydrogen

Textbook/ answer key

P.187

10.3 The reactions of metals with acids

1 potassium, sodium, lithium, calcium.

2 Products: magnesium chloride and water

magnesium + hydrochloric acid → magnesium chloride + water

3 Collect the hydrogen in a test tube. Put a lit splint into the test tube. The splint makes a squeaky pop and goes out.

4 To ensure that there is the same amount of metal free to react, allowing him to compare the results.

P.198

4a **i** the metal

ii Amount of dilute hydrochloric acid and the amount of metal added.

iii To ensure that they are the only variables influencing the results (to make it a fair test).

d To determine whether the type of acid affects the reaction.

e Collect the gas produced in a test tube. Place a lit splint inside. If the splint makes a squeaky pop and goes out, there is hydrogen present.