KS3 SCIENCE · CHEMISTRY

Acids and alkalis: exam questions

Name _____
Total: 17 marks

1 State the pH of a neutral solution. **[1 mark]**

2 A solution has a pH of 3. What does this tell you about the solution? **[1 mark]**

3 Describe the colour of litmus in an acid and in an alkali. **[2 marks]**

4 Name the two products made when an acid reacts with an alkali. **[2 marks]**

5 Name the salt made when hydrochloric acid reacts with sodium hydroxide. **[1 mark]**

6 Describe how to make crystals of a salt from an acid and an alkali. **[4 marks]**

7 Magnesium reacts with hydrochloric acid. Write the word equation for this reaction. **[2 marks]**

8 Describe the test for hydrogen gas and its result. **[2 marks]**

9 Explain how an indigestion tablet relieves indigestion. **[2 marks]**

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Acids and alkalis: mark scheme

Total: 17 marks

1 [1 mark]

- 7 **(1)**

2 [1 mark]

- It is an acid (accept: acidic, a weak acid) **(1)**

3 [2 marks]

- Red in an acid **(1)**
- Blue in an alkali **(1)**

4 [2 marks]

- A salt **(1)**
- Water **(1)**

5 [1 mark]

- Sodium chloride **(1)**

6 [4 marks]

- Add alkali to the acid until it is neutral **(1)**
- Pour the solution into an evaporating basin **(1)**
- Heat it to evaporate some of the water **(1)**
- Leave it to cool so that crystals form **(1)**

7 [2 marks]

- magnesium + hydrochloric acid on the left **(1)**
- magnesium chloride + hydrogen on the right **(1)**

8 [2 marks]

- Hold a lit splint in the gas **(1)**
- It burns with a squeaky pop **(1)**

9 [2 marks]

- It contains a base (accept: an alkali) **(1)**
- It neutralises the extra stomach acid **(1)**