2.3 Chemical Changes: 10-minute Pack

AQA 8462 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 The pH scale runs from 0 to 14 and indicates how acidic or alkaline a solution is.

(a) State the pH value of a neutral solution (pure water). **(1)**

(b) State whether a solution with pH 3 is acidic, alkaline or neutral. **(1)**

(Total for Question 1 is 2 marks)

---

2 Hydrochloric acid is a common acid used in the laboratory.

(a) Give the chemical formula for hydrochloric acid when dissolved in water (aqueous form). **(1)**

(b) State the name of the ion produced when hydrochloric acid ionises in water. **(1)**

(Total for Question 2 is 2 marks)

© Revision Library | revisionlibrary.co.uk

3 Answer the following multiple choice questions about chemical changes.

(a) Which gas is tested for using a lit splint that produces a squeaky pop? **(1)**

- ☐ A) Oxygen
- ☐ B) Hydrogen
- ☐ C) Carbon dioxide
- ☐ D) Chlorine

(b) Which piece of equipment is used to accurately measure the volume of acid added during a titration? **(1)**

- ☐ A) Measuring cylinder
- ☐ B) Beaker
- ☐ C) Burette
- ☐ D) Conical flask

(c) Which ion is always produced when an acid dissolves in water? **(1)**

- ☐ A) OH^-
- ☐ B) H^+
- ☐ C) Na^+
- ☐ D) Cl^-

(d) Which of these correctly describes reduction? **(1)**

- ☐ A) Gain of oxygen
- ☐ B) Loss of oxygen
- ☐ C) Loss of hydrogen
- ☐ D) Gain of protons

(Total for Question 3 is 4 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 2.3 Chemical Changes: 10-minute Pack

Question 1

(a) pH 7 cao **B1**

(a) Answer: pH 7

(b) acidic cao **B1**

(b) Answer: Acidic

Question 2

(a) HCl (aq) or HCl **B1**

(a) Answer: HCl (aq)

(b) hydrogen ion or H^+ **B1**

(b) Answer: Hydrogen ion, H^+

Question 3

(a) B cao **B1**

(a) Answer: B) Hydrogen

(b) C cao **B1**

(b) Answer: C) Burette

(c) B cao **B1**

(c) Answer: B) H^+

(d) B cao **B1**

(d) Answer: B) Loss of oxygen

© Revision Library | revisionlibrary.co.uk