Your notes

GCSE Chemistry: revision notes

Tests for gases

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Testing for hydrogen

- Hold a burning splint at the open end of a test tube of the gas.
- Hydrogen burns rapidly with a squeaky pop.

Testing for oxygen

- Put a **glowing splint** into a test tube of the gas.
- The splint relights if oxygen is present.

Testing for carbon dioxide

- Shake the gas with, or bubble it through, **limewater** (calcium hydroxide solution).
- **Limewater** turns milky (cloudy) if carbon dioxide is present.

Testing for chlorine

- Hold damp **litmus paper** in the gas.
- Chlorine **bleaches** the **litmus paper** white. Blue litmus may turn red first, then white.
- Chlorine is toxic, so this test should be done in a **fume cupboard**.

Key terms

Squeaky pop test	The test for hydrogen: it burns with a squeaky pop.
Glowing splint	A splint with no flame that relights in oxygen.
Limewater	Calcium hydroxide solution, which turns milky with carbon dioxide.
Litmus paper	An indicator paper; damp litmus is bleached by chlorine.
Bleach	To remove colour, as chlorine does to damp litmus.

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Fume cupboard	An enclosed space with an extractor fan, used for toxic gases.

Quick questions

Cover the answers and test yourself: remembering is what makes it stick.

1. What is the test for hydrogen?
2. What is the test for oxygen?
3. What is the test for carbon dioxide?
4. What is the test for chlorine?
5. Why should litmus paper be damp for the chlorine test?
6. What is limewater?
7. Magnesium reacts with acid. How could you show the gas is hydrogen?
8. A gas relights a glowing splint. What is it?

Answers

1. A burning splint gives a squeaky pop
2. A glowing splint relights
3. Limewater turns milky
4. Damp litmus paper is bleached
5. Chlorine must dissolve in water to bleach the paper
6. Calcium hydroxide solution
7. Put a burning splint in it and hear a squeaky pop
8. Oxygen

What to do next

Practise 10 questions on this topic

Try 5 exam questions, with mark schemes

Read the lesson, one step at a time

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