

Name:

Class:



Describe a test to show that a gas is carbon dioxide.

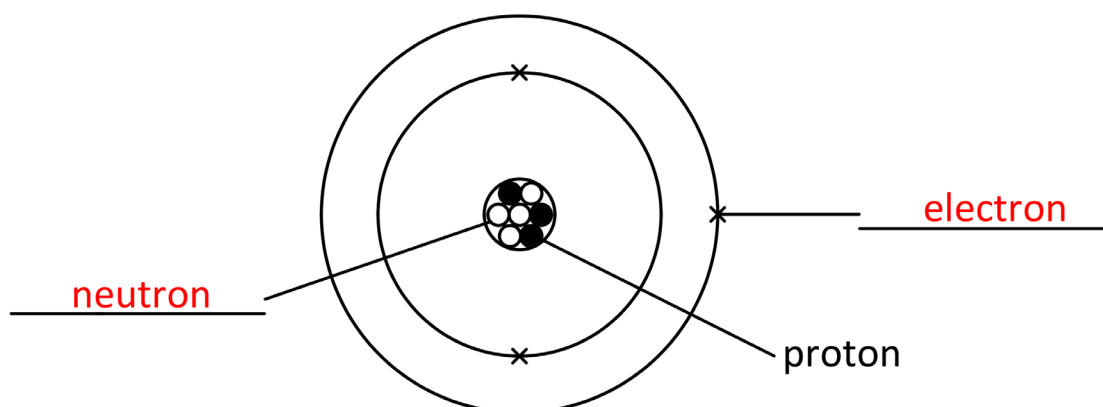
Test: bubble the gas through limewater.

Positive result: if the gas being bubbled through the limewater is CO₂ then the limewater will turn cloudy.

Calcium is in group **2 /two** of the periodic table of elements.

Fluorine is in group **7 /seven** of the periodic table of elements.

Complete the diagram by labelling the other two particles shown.



Zinc reacts with dilute hydrochloric acid to produce zinc chloride and hydrogen.
Write the **word equation** for the reaction of zinc with dilute hydrochloric acid.



The atomic number of lithium is?

3

The relative mass of a proton is?

1

In what **two states** do ionic compounds conduct electricity?

Molten and aqueous

How do metals conduct electricity?

Metals have delocalised electrons which can move and carry charge.

Give the electronic configuration of Na⁺.

2, 8

Give the electronic configuration of O²⁻.

2, 8

A sample of gallium contains 60.2% of gallium-69 and 39.8% of gallium-71.
Calculate the relative atomic mass of gallium.

$$\text{Relative atomic mass} = \frac{60.2 \times 69 + 39.8 \times 71}{100}$$

$$\text{Relative atomic mass} = 69.8$$