

Name:

Class:



Complete the word and balanced symbol equation for this reaction:

Magnesium carbonate + hydrochloric acid → **Magnesium chloride + carbon dioxide + water**

State the formula of calcium carbonate.

Give **two** ways to increase the rate of a chemical reaction.Accept any **two** of the following:

- Increase the temperature
- Increase the concentration (of solutions)
- Increase the pressure (of gases)
- Increase the surface area (of a solid)
- Add a catalyst.

Two tests were carried out to identify the ions in a salt.

Test: flame test on solid salt X.**Result:** lilac flame.

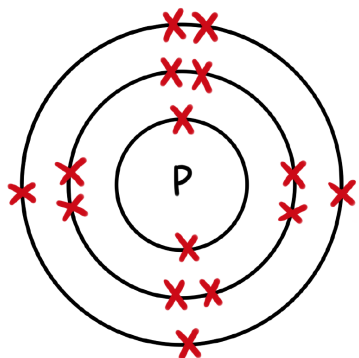
Identify the ion in the salt that gives the lilac flame.

Ion = **K⁺ or potassium****Test:** addition of dilute nitric acid and silver nitrate solution to a solution of the salt.**Result:** white solid formed.

Identify the ion in salt X that produces the white solid.

Ion = **Cl⁻ or chloride ion**

The electronic configuration of phosphorus is 2,8,5

Draw the **electron configuration** for an atom of phosphorus.State the numbers of protons, electrons and neutrons in this **atom** of phosphorus.Protons: **15**Electrons: **15**Neutrons: **16**

Give the general formula for an alkene.



Give the formula of aluminium oxide.

