

Form 6 Science Exam Guidance: Autumn Term

Knowing the following will be very helpful in the exam:

Investigations

- Know how to **plan an investigation**, taking into account fair testing, reliability and the correct selection of apparatus.
- Know the meaning of and difference between: a **method**, a **prediction** and a **conclusion**.

Solutions, Separation and States of Matter

- Know the meaning of **melting**, **freezing**, **evaporation** and **condensation** and recognise or give examples of each.
- Know the difference between **weight**, **mass** and **volume** and what apparatus is used to measure these.
- Correctly draw and label a simple **filter**: which equipment is needed and the words '**residue**' and '**filtrate**'
- Correctly identify which methods to use to separate different mixtures.
 - Know when to use **filtration**, **distillation**, **sieving**, **decanting** or **magnetism**.
 - Explain how each method works to separate the mixture.
- Know and use the formula used to calculate **density** and its units.
- Plot a **scatter graph** on x and y axes, including choosing appropriate scales for each axis.

Forces

- Identify the **pivot**, **load** and **lever** on a diagram.
- Know the **unit of force**
- Know that forces can be **balanced** or **unbalanced**.
- Know about the different forces: **weight**, **gravity**, **upthrust**, **air resistance**, **friction** and the term, '**reaction force**'.
- Draw and label types of **forces on a diagram with arrows** to represent the size of each force.
- Know and use the formula for **pressure** and the units.
- Know how to calculate an **average**.
- Know and use the formula for **speed** and the units.

Examination tips:

- Make sure you have all the equipment you will need before the day of your exam. For science this is a pen, pencil, ruler. A **calculator** is also needed. In Form 6 a basic calculator is sufficient but a Casio scientific calculator is required in Form 7 and 8.
- **READ** each question and any information really carefully.
- Write an answer for **every question**, even if you aren't sure. Try to include as much detail and use scientific words.