

Science T1 Assessment

There are two papers both are an hour long. **The assessments should be completed between 4th February and 15th February and the data must be on SIMs for Tuesday 26th February.** A written report is required and the department deadline for this is 12th March. Revision should be done in lessons this term. These deadlines will give you enough time to write reports during term time after the scale scores have been calculated.

Paper 1 looks at breadth of knowledge asking short answer questions across a wide range of biology, chemistry and physics topics.

Paper 2 has longer questions which require the recall of knowledge learnt in lessons in detail, apply their knowledge to specific examples or unfamiliar contexts and to analyse and interpret information.

Students have access to the Kerboodle online resources, which include a digital textbook. The biology content is on pages 14-56 of Activate 1 and P4-20 of Activate 2. The chemistry content is on P60-P108 of Activate 1 and P72-84 of Activate 2. The physics content is on P112-155 of Activate 1 and P122-138 of Activate 2.

Paper 1 content for revision

The structures and functions of components of animal and plant cells

The parts of a microscope

Plant structures involved in pollination and the mechanism of pollination

Plant germination

Deficiency diseases

The function of the skeleton and the role of muscles in movement

Types of drug and addiction

Role of the placenta and effect of alcohol on a foetus

Elements, compounds and the arrangement of atoms in these substances

Test for carbon dioxide

Particle theory for solids, liquids and gases

Changes of state

Definition of diffusion

The reactions of metals and alkalis with acid

Universal indicator for measuring pH

Thermal decomposition of metal carbonates

Definition of luminous

Wavelength and amplitude

Law of reflection and refraction of light by water

Colour and the dispersion of light using a prism

Series and parallel circuits

Magnetic metals and the benefits of using electromagnets

The structure of an atom

The production of static electricity

Paper 2 content for revision

Breathing, the structure of the lungs and the effect of smoking

The function of sperm cell structures

Nutritional content of foods and the role of the different food groups

Particles theory of gases and the effect of temperature on gas pressure

Universal indicator solution as a measure of pH

Neutralisation reaction between acids and alkalis

The production of copper sulfate crystals from a solution

Conservation of mass

Exothermic reactions

Forces – gravity and air resistance

Calculations of weight

Colour and why specific colours are seen

Definition of ultrasound and calculation of speed of sound

The resistance of a wire and calculations of resistance

Changing the strength of electromagnets