

## Science T1 Assessment

There are two papers both are an hour long. **The assessments will be completed between 3<sup>rd</sup> February and 14<sup>th</sup> February.**

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.

The science department have key stage 3 revision guides for sale.

### 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 alkali's 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