

# Science mock exams 2022 - Topic list

## Trilogy foundation

Biology	Chemistry	Physics
<ul style="list-style-type: none"><li>• Function of the digestive organs</li><li>• Function of bile</li><li>• Types of enzymes</li><li>• Food tests</li><li>• Structure of the leaf</li><li>• Diffusion</li><li>• Factors affecting the rate of diffusion</li><li>• Photosynthesis required practical</li><li>• Diseases in plants</li><li>• Malaria</li><li>• Cancer</li><li>• Animal and bacterial cells</li><li>• Antibiotics</li><li>• Mitosis and the cell cycle</li></ul>	<ul style="list-style-type: none"><li>• Atomic structure (finding the number of protons, neutrons, and electrons)</li><li>• Changes of state</li><li>• Properties of Group 1 elements</li><li>• Covalent bonding</li><li>• Neutralisation reactions</li><li>• Strong and weak acids and alkalis</li><li>• Giant covalent structures</li><li>• Allotropes of carbon</li><li>• Structure of polymers</li><li>• Properties of alloys</li><li>• Calculating relative formula mass</li><li>• Extraction of metals using the reactivity series</li><li>• Properties of ionic compounds</li><li>• Properties of metals</li><li>• Reaction of carbonates and acids</li><li>• Electrolysis of metal salts</li><li>• Finding the reactivity of metals using temperature change</li></ul>	<ul style="list-style-type: none"><li>• Circuit symbols</li><li>• Function of components</li><li>• Calculating means</li><li>• IV characteristics of a filament lamp</li><li>• Gravitational potential energy (GPE)</li><li>• Alpha decay equations</li><li>• Beta decay equations</li><li>• Properties of different types of nuclear radiation</li><li>• Types of variables</li><li>• Calculating density</li><li>• Calculating power</li><li>• Parts of the National Grid</li><li>• Finding the specific heat capacity of a substance.</li><li>• Using equations to calculate: power, resistance, GPE, elastic potential energy, specific latent heat.</li></ul>