

Science mock exams 2022 - Topic list

Triple science

Biology	Chemistry	Physics
<ul style="list-style-type: none">• Function of organelles• Differences between animal, fungus, and plant cells• Osmosis in plant cells• Osmosis required practical• Diseases caused by fungi• Types of enzymes• Food tests• Function of different nutrients in food• Balanced diets• Making an onion slide required practical• Calculations involving the magnification equation• Comparing types of microscope• Function of roots• Mitosis• Structure of the leaf• Transpiration and translocation• Factors affecting transpiration• Surface area to volume ration• Metabolism• Adaptations of the alveoli and villi• Vaccines• Monoclonal antibodies	<ul style="list-style-type: none">• Parts of the Periodic Table• Properties of Group 1 elements• Properties of Transition Metals• Electron configuration• Properties of metals• Ionic bonding• Temperature change required practical• Exothermic and endothermic reaction profiles• Giant covalent structures• Allotropes of carbon and their properties• Moles• Reactions of metal oxides with acids• Oxidation reactions and half-equations• Making batteries• Ionic half-equations in electrolysis• Electrolysis of sodium chloride• Extracting metals using the Reactivity Series• Calculating reacting masses• Strong and weak acids• Calculating concentration	<ul style="list-style-type: none">• Unit conversions• Advantages and disadvantages of wind power• Improving efficiency• Density required practical• Rearranging equations• Calculations involving the power equation• Calculations involving the efficiency equation• Calculations involving specific heat capacity• Thermal conductivity• How static charges are created• Interaction between static charges• Sparks• Parts of the National Grid• Calculations involving the charge equation• Alpha decay equations• Contamination and irradiation• Calculating specific latent heat• Calculations involving the GPE and power equations• Calculations involving the KE and elastic potential energy equation• Circuit symbols for components• Resistance in parallel circuits