



Co-op Belle Vue Science five year overview				
Year 7 Long Term Plan -				
Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Working scientifically	Particles	Forces	Cells	Pure and impure
Key concepts	Key concepts	Key concepts	Key concepts	Key concepts
<ul style="list-style-type: none"> • Safety in the lab • How to do an investigation • Analysing results of investigations 	<ul style="list-style-type: none"> • Drawing particle diagrams • Changing states • Diffusion • Density • Pressure 	<ul style="list-style-type: none"> • Contact and non-contact forces • Hooke's Law • Resultant forces • Speed • Distance-time graphs 	<ul style="list-style-type: none"> • Organelles • Specialised cells • Using microscopes • Organ systems • Muscles and joints 	<ul style="list-style-type: none"> • Elements • Periodic table • Chemical formulae • Pure vs impure
Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application



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Year 7 Long Term Plan		
Topic 7	Topic 8	Topic 9
Energy	Reproduction	Electricity
Key concepts	Key concepts	Key concepts
<ul style="list-style-type: none">• Energy stores• Energy transfer• Conduction, convection, radiation• Conductors and insulators	<ul style="list-style-type: none">• Organs of reproductive system• Puberty• Fertilisation• Menstrual cycle• IVF and pregnancy• Plant reproductive system• Fruits and seed	<ul style="list-style-type: none">• Current• Series and parallel circuits• Potential difference• Resistance• Power
Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application



Year 8 Long Term Plan				
Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Ecosystems	The periodic table	Space	Digestion and health	Chemical reactions
Key concepts	Key concepts	Key concepts	Key concepts	Key concepts
<ul style="list-style-type: none"> • Habitats • Food chains • Adaptations • Sampling populations 	<ul style="list-style-type: none"> • Metals and non-metals • History of periodic table • Groups 1,7,0 • Compounds • Word and symbol equations 	<ul style="list-style-type: none"> • Planets • Gravity and weight • Satellites • Day and night • Seasons 	<ul style="list-style-type: none"> • Balanced diet • Food tests • Digestive organs • Enzymes • Smoking and drugs 	<ul style="list-style-type: none"> • Oxidation • Conservation of mass • Exothermic and endothermic • pH
Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application



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Year 8 Long Term Plan			
Topic 6	Topic 7	Topic 8	Topic 9
Waves	Biological processes	Metals and other materials	Magnetism
Key concepts	Key concepts	Key concepts	Key concepts
<ul style="list-style-type: none">• Refraction• Colour• Volume and pitch	<ul style="list-style-type: none">• Photosynthesis• Plant adaptations• Respiration• Exercise• Fermentation	<ul style="list-style-type: none">• Metals and acid reactions• Catalysts• Concentration• Balancing equations• Displacement• Polymers	<ul style="list-style-type: none">• Bar magnets• Earth's magnetic field• Electromagnets
Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application



Year 9 Long Term Plan				
Topic 7	Topic 8	Topic 9	Topic 10	Topic 11
Matter	Cells (KS4)	Atoms and periodic table (KS4)	Energy (KS4)	Organisation (KS4)
Key concepts	Key concepts	Key concepts	Key concepts	
<ul style="list-style-type: none"> • Particle model • Density 	<ul style="list-style-type: none"> • Types of cell • Differentiation • Microscopy • Cell cycle • Stem cells • Cell transport 	<ul style="list-style-type: none"> • Elements, compounds, mixtures • History of atom • Relative atomic mass • Electronic structure • History periodic table • Groups 1,7,0 	<ul style="list-style-type: none"> • Energy stores and pathways • Specific heat capacity • Power • Energy resources 	<ul style="list-style-type: none"> • Digestive system • Food tests • Enzymes • Heart and blood • CHD • Cancer
Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application



Year 10 Long Term Plan				
Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Bonding	Electricity	Infection	Quantitative chemistry	Particle model
Key concepts	Key concepts	Key concepts	Key concepts	Key concepts
<ul style="list-style-type: none"> • Ionic bonding • Covalent bonding • Metallic bonding • Properties of substances • Allotropes of carbon • Polymers 	<ul style="list-style-type: none"> • Current, resistance, pd • IV graphs • Resistance of wire • Domestic uses and safety • Power • National grid 	<ul style="list-style-type: none"> • Types of pathogen • Example of disease • Immune response • Human defense • Vaccination and drugs • Clinical trials 	<ul style="list-style-type: none"> • Conservation of mass • RAM • Moles • Limiting reactants • Concentration 	<ul style="list-style-type: none"> • Density • Internal energy • Specific latent heat • Pressure
Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application	Assessment: PK part A - recall PK part B - application



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