Subject: Science

Year 7 (6 per fortnight)		
	Theme	**Teaching**
1	Intro to Science	L1 - Bunsen Burner L2 - Microscope L3 - Circuits
2	Baseline Assessment	L1 - Assessment L2 - Review L3 - Review
3	Cells and Skeletal System	L1 - Animal Cells L2 -Plant Cells L3 - Observing Cells (Theory)
4	Cells and Skeletal System	L1 - Observing Cells (Practical) L2 - Specialised Cells L3 - Diffusion
5	Cells and Skeletal System	L1 - Cells, Tissues, Organs and Systems L2 -The Human Skeleton L3 - Muscles
6	Progress Check	L1 - Biomechanics Investigation L2 - Progress Check L3 - Review
7	Particular Nature of Matter	L1 - States of Matter L2 - Investigating properties L3 - Cooling curve (collect data)
8	Particular Nature of Matter	L1 - Cooling curve (analyse data) L2 - Modelling particles L3 - Density investigation
9	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
10	Energy	L1 - energy stores L2 - energy pathways L3 - conduction
11	Energy	L1 - convection L2 - radiation L3 - reducing thermal energy loss
12	Energy	L1 - renewable and non renewable L2 - cost of electricity and energy use L3 - future energy
13	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
14	Nutrition and Digestion	L1 - A balaned diet. L2 - Energy requirement investigation L3 - Malnutrition
15	Nutrition and Digestion	L1 - Food tests (sugars and starch) L2 - Food tests (protein and fats) L3 - The digestive system
16	Summative 1	L1 - Revision L2 - Summative L3 - Review
17	Nutrition and Digestion	L1 - Enzymes L2 - Enzymes in digestion. L3 - Food and plants
18	Atoms, Elements and Compounds	L1 - Simple atomic model L2 - Elements and compounds L3 - Symbols & Formulae
19	Atoms, Elements and Compounds	L1 - Chemical vs Physical change L2 - Simple reactions L3 - Further reactions

Year 7 (6 per fortnight)		
	Theme	**Teaching**
20	Atoms, Elements and Compounds	L1 - Conservation of Mass (Planning) L2 - Conservation of mass (practical) L3 - Conservation of mass (data analysis)
21	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
22	Motion and Forces	L1 - contact and non contact forces L2 - force diagrams L3 - balanced and unbalanced forces
23	Motion and Forces	L1 -unbalanced forces L2 - forces and motion L3 -calculating speed
24	Motion and Forces	L1 - investigating speed L2 - speed distance time graphs 1 L3 -speed,distance time graphs 2
25	Careers Week	Theme not decided
26	Science Week	Theme not decided
27	Motion and Forces	L1 - pressure L2 - investigating pressure L3 -forces in fluids
28	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
29	Reproduction	L1 - The human reproductive system L2 - The menstrual cycle L3 - Fertilisation
30	Reproduction	L1 -The development of a foetus L2 - Birth L3 - Reproduction in plants
31	Reproduction	L1 - Pollination L2 - Seed dispersal (theory) L3 - Seed dispersal (investigation)
32	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
33	Pure and Impure Substances	L1 - Pure substances L2 - Identifying pure substances L3 - Mixtures & Solutions
34	Pure and Impure Substances	L1 - Diffusion L2 - Gases in solutions L3 - Filtration
35	Pure and Impure Substances	L1 - Evaporation L2 - Distillation L3 - Chromatography
36	Matter	L1 - states of matter L2 - particle model L3 -changing state
37	Summative 2	L1 - Revision L2 - Summative L3 - Review
38	Matter	L1 - density L2 - diffusion L3 -atoms and molecules
39	Matter	L1 -chemical and physical changes L2 - energy in molecules L3 - conservation of mass

Subject: Science

Year 8 - Sets 1 to 4 (6 per fortnight)		
	Theme	**Teaching**
1	Gas Exchange Systems and Health	L1 - The respiratory system L2 - Gas exchange in humans L3 - Gas exchange in plants
2	Gas Exchange Systems and Health	L1 - The lungs and lifestyle factors L2 - Investigaing lung capacity L3 - Exercise
3	Gas Exchange Systems and Health	L1 - Smoking L2 - Alcohol L3 - Drugs
4	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
5	The Periodic Table	L1 - The Periodic Table L2 - Group 1 L3 - Group 7
6	The Periodic Table	L1 - Group 0 L2 - Metals & Mon-metals L3 - Reactivity Series
7	The Periodic Table	L1 - Reactivity Series L2 - Halogen Displacements L3 - Consolidation
8	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
9	Photosynthesis and Respiration	L1 - Photosynthesis (theory) L2 - Photoysnthesis (investigation) L3 - Using glucose
10	Photosynthesis and Respiration	L1 - Adaptations of a leaf L2 - Testing different leaves for starch L3 - Aerobic respiration
11	Photosynthesis and Respiration	L1 - Response to Exercise L2 - Anaerobic respiration in humans L3 - Fermentation
12	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
13	Electricity and Electromagnetism	L1 -circuit diagrams and symbols L2 - current in series and parallel L3 - potential difference in series and parallel
14	Electricity and Electromagnetism	L1 - Investigating Resistance L2 - Static Electricity and Electric Fields L3 - Magnetic Fields
15	Electricity and Electromagnetism	L1 - Earth Magnetism L2 - Electromagnets L3 - Uses of Electromagnets
16	STEM Week	TBC
17	Chemical Reactions	L1 - Combustion L2 - Thermal Decomposition L3 - Oxidation
18	Chemical Reactions	L1 - Displacement L2 - pH Scale & Indicators L3 - Neutralisation
19	Chemical Reactions	L1 - Acids + Metals L2 - Acids + Alkalis L3 - Catalysts

Year 8 - Sets 1 to 4 (6 per fortnight)		
	Theme	**Teaching**
20	Summative 1	L1 - Revision L2 - Summative L3 - Review
21	Application of Forces	L1 - work done L2 - moments L3 - Air resistance
22	Application of Forces	L1 - friction L2 - stopping distances L3 - streamlining
23	Application of Forces	L1 - upthrust L2 - forces and stretching L3 - Hookes law
24	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
25	Energetics	L1 - Heating Curve L2 - Revisit state changes L3 - Exothermic reactions
26	Science Week	Theme not decided
27	Energetics	L1 - Endothermic reactions L2 - Effect of Catalysts L3 - Catalyst Investigation (Prac)
28	Energetics	L1-3 - Heat/Cool Pack Challenge
29	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
30	Ecosystems	L1 - Food chains L2 - Food webs L3 - Interdependant relationships
31	Ecosystems	L1 - Predator-prey relationships L2 - Competition L3 - Changing populations
32	Ecosystems	L1 - The importance of pollinators L2 - The environment L3 - Bioaccumulation
33	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
34	Observed and Sound Waves	L1 -Behaviour of waves L2 - speed of sound in different media L3 -Reflection of sound
35	Observed and Sound Waves	L1 -transmission of sound L2 - absorption of sound L3 - wave interference
36	Observed and Sound Waves	L1 - Ear and vibration L2 - hearing range L3 - loud speaker and microphones
37	Summative 2	L1 - Revision L2 - Summative L3 - Review
38	Summative Consolidation	L1 - Consolidation L2 - Consolidation L3 - Consolidation
39	STEM Week	TBC

Subject: Science

Year 8 - Sets 5 to 8 (6 per fortnight)		
	Theme	**Teaching**
1	The Periodic Table	L1 - The Periodic Table L2 - Group 1 L3 - Group 7
2	The Periodic Table	L1 - Group 0 L2 - Metals & Mon-metals L3 - Reactivity Series
3	The Periodic Table	L1 - Reactivity Series L2 - Halogen Displacements L3 -
4	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
5	Gas Exchange Systems and Health	L1 - The respiratory system L2 - Gas exchange in humans L3 - Gas exchange in plants
6	Gas Exchange Systems and Health	L1 - The lungs and lifestyle factors L2 - Investigaing lung capacity L3 - Exercise
7	Gas Exchange Systems and Health	L1 - Smoking L2 - Alcohol L3 - Drugs
8	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
9	Electricity and Electromagnetism	L1 -circuit diagrams and symbols L2 - current in series and parallel L3 - potential difference in series and parallel
10	Electricity and Electromagnetism	L1 - Investigating Resistance L2 - Static Electricity and Electric Fields L3 - Magnetic Fields
11	Electricity and Electromagnetism	L1 - Earth Magnetism L2 - Electromagnets L3 - Uses of Electromagnets
12	Progress Check	L1 - Motors L2 - Progress Check L3 - Review
13	Photosynthesis and Respiration	L1 - Photosynthesis (theory) L2 - Photoysnthesis (investigation) L3 - Using glucose
14	Photosynthesis and Respiration	L1 - Adaptations of a leaf L2 - Testing different leaves for starch L3 - Aerobic respiration
15	Photosynthesis and Respiration	L1 - Response to Exercise L2 - Anaerobic respiration in humans L3 - Fermentation
16	STEM Week	TBC
17	Application of Forces	L1 - work done L2 - moments L3 - Air resistance
18	Application of Forces	L1 - friction L2 - stopping distances L3 - streamlining
19	Application of Forces	L1 - upthrust L2 - forces and stretching L3 - Hookes law

Year 8 - Sets 5 to 8 (6 per fortnight)		
	Theme	**Teaching**
20	Summative 1	L1 - Revision L2 - Summative L3 - Review
21	Chemical Reactions	L1 - Combustion L2 - Thermal Decomposition L3 - Oxidation
22	Chemical Reactions	L1 - Displacement L2 - pH Scale & Indicators L3 - Neutralisation
23	Chemical Reactions	L1 - Acids + Metals L2 - Acids + Alkalis L3 - Catalysts
24	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
25	Ecosystems	L1 - Food chains L2 - Food webs L3 - Interdependant relationships
26	Science Week	Theme not decided
27	Ecosystems	L1 - Predator-prey relationships L2 - Competition L3 - Changing populations
28	Ecosystems	L1 - Predator-prey relationships L2 - Competition L3 - Changing populations
29	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
30	Oberserved and Sound Waves	L1 -Behaviour of waves L2 - speed of sound in different media L3 -eflection of sound
31	Observed and Sound Waves	L1 -transmission of sound L2 - absorption of sound L3 - wave interference
32	Observed and Sound Waves	L1 - Ear and vibration L2 - hearing range L3 - loud speaker and microphones
33	Progress Check	L1 - Revision L2 - Progress Check L3 - Review
34	Energetics	L1 - Heating Curve L2 - Revisit state changes L3 - Exothermic reactions
35	Energetics	L1 - Endothermic reactions L2 - Effect of Catalysts L3 - Cool pack challenge
36	Energetics	L1 - Effect of Catalysts L2 - L3 -
37	Summative 2	L1 - Revision L2 - Summative L3 - Review
38	Summative Consolidation	L1 - Consolidation L2 - Consolidation L3 - Consolidation
39	STEM Week	TBC