

Key Stage 3 Science Curriculum overview

Marked assessment – Exam question (if ILT does not fall during that topic) and Investigation (including assessed overall level, actions for pupils to respond to now, and personal focus for next investigation) one of each per topic.

ILT's – These depend on the school ILT calendar and are also teacher assessed

Year 7 Biology

Lesson	Unit	Year 7	Teacher Assessment
1	Cells, Tissues, Organs, and Systems	Using a Microscope	
2		Animal Cells	
3		Plant Cells	Exam Question
4		Specialised Cells and Unicellular Organisms	
5		Diffusion investigation	
6			
7			Diffusion Investigation
8		Cell Organisation	
9		The Skeleton	
10		Joints and Muscles	
11		Muscle Strength Investigation	

Lesson	Unit	Year 7	Teacher Assessment
1	Reproduction	Sex Organs	
2		Fertilisation in Humans	
3		Pregnancy	
4		Birth	Exam Question
5		Growing Up	
6		Periods	
7		Flowers and Pollination	
8		Fertilisation in Plants	
9		Spreading the Seeds, including linked investigation.	
10			
11		Seed Investigation	

Lesson	Unit	Year 7	Teacher Assessment
1	Ecology	Making Food (photosynthesis)	
2		Photosynthesis	
3		Leaves and Photosynthesis	
4		Pondweed Investigation	
5			Pondweed Investigation
6		Food Chains	
7		Food Webs	
8		Food Pyramids and Energy Flow	Exam question
9		Predators and Prey	
10		Habitats and Adaptation	

Year 7 Chemistry

Lesson	Unit	Year 7	Teacher Assessment
1	Acids and Alkalis	Hazard Symbols	
2		Acids and Alkalis	
3		Indicators	Exam Question
4		Indicators investigation	
5			
6			Indicators investigations
7		Neutralisation	
8		Acid Reactions: Metals	
9		Acid reactions: Metal Carbonates	

Lesson	Unit	Year 7	Teacher Assessment
1	Particles	Matter	
2		Properties of solids, liquids and gases	
3		Changes of state	Exam Question
4		Pure substances and mixtures	
5		Mixtures, diffusion and dissolving	
6		Dissolving Investigation	
7			
8			Dissolving investigation
9		Separating techniques	
10		Distillation	
11		Chromatography	

Lesson	Unit	Year 7	Assessment
1	Atoms	Atoms and elements	
2		The periodic table	
3		Metals and non-metals	Exam Question
4		Compounds	
5		Compound names and formula	
6		Compounds Investigation	
7			Compounds Investigation
8		Word and Symbol Equations	
9		Mass Conservation	
10		Types of reactions	

Year 7 Physics

Lesson	Unit	Year 7	Teacher Assessment
1	Electricity and Magnetism	Complete circuits	
2		Electric Current	
3		Cells and Batteries	
4		Wiring a plug	
5		Series and parallel	
6		Static electricity	Exam question
7		Magnetic forces	
8		Making magnets	
9		Magnetic fields	
10		Electromagnets	
11		Electromagnets investigation	
12			

Lesson	Unit	Year 7	Teacher Assessment
1	Forces and energy in fuels	Introduction to forces	
2		Measuring forces	
3		Hooke's Law	
4		Friction	
5		Up-thrust and density	Exam question
6		Burning fuels	
7		Carbon footprint	
8		Energy resources	
9		Saving energy	
10		Food as fuel	
11			

Lesson	Unit	Year 7	Teacher Assessment
1	Light and Space	How light travels	
2		Travelling light Investigation	
3			Travelling light Investigation
4		Reflection	
5		Refraction	
6		Coloured light	
7		Eye/pinhole camera	
8		Solar System	
9		Day/night and the moon	
10		Seasons	Exam question

Year 8 Biology

Lesson	Unit	Year 8	Teacher Assessment
1	Diet and Health	The Digestive System	
2		A Balanced Diet	
3		Food Tests	
4		Malnutrition	Exam Question
5		Vitamins and Minerals	
6		Vitamin C investigation	
7			Vitamin C investigation
8		Smoking	
9		Alcohol	
10		Drugs	

Lesson	Unit	Year 8	Teacher Assessment
1	Breathing and Respiration	Lung structure	
2			
3		Breathing	Exam Question
4		Aerobic Respiration	
5		Anaerobic Respiration	
6		Exercise Investigation	
7			Exercise Investigation
8		Asthma and Smoking	

Lesson	Unit	Year 8	Assessment
1	Genetics and Evolution	Classification	
2			
3		Variation	
4		Inherited and Environmental Variation	Exam Question
5		Genes and Inheritance	
6		Modelling Genetic Material	
7		Evolution and Extinction	
8		Beak Investigation	
9			Beak investigation
10		Biodiversity	

Year 8 Chemistry

Lesson	Unit	Year 8	Teacher Assessment
1	Earth and Atmosphere	Earth's Structure	
2		Rock types and the Rock Cycle	Exam Question
3			
4		The Earth's resources	
5		Recycling resources	
6		The Earth's atmosphere	
7		Acid rain investigation	
8			Acid rain investigation
9		CO ₂ and its impact	
10		The Carbon cycle	

Lesson	Unit	Year 8	Teacher Assessment
1	Metals and non-metals	Properties of metals	
2		Reactivity series	
3		Reactivity of metals investigation	
4			Reactivity investigation
5		Displacement reactions	
6		Extracting metals	
7		Oxidation	Exam question
8		Properties of non-metal elements	
9		Properties of non-metal compounds	
10		Thermal decomposition	
11		Combustion	

Lesson	Unit	Year 8	Teacher Assessment
1	Reactions and Energetics	Chemical reactions	
2		Reactions as equations	Exam question
3		Exothermic reactions	
4		Endothermic reactions	
5		Chemical bonding	
6		Catalyst Investigation	
7			
8			Catalyst investigation
9		The Limestone Cycle	

Year 8 Physics

Lesson	Unit	Year 8	Teacher Assessment	
1	Heat and Sound	Heat energy and temperature		
2		Warming and Cooling		
3		Conduction		
4		Convection		
5		Radiation		
6		Heat Loss Investigation		
7				Heat loss Investigation
8		Sound waves		
9		Sound waves continued		
10		Noise		Exam Question

Lesson	Unit	Year 8	Teacher Assessment	
1	Energy and Electricity	Energy Transfers		
2		Electricity from chemicals		
3		Wind turbines Investigation		
4				Wind turbine investigation
5		Electricity from fuels		
6		Electricity into heat		
7		Paying for electricity		
8		Sustainable energy		
9		Sustainable energy continued		
10		Circuits		Exam question
11		Circuits continued		

Lesson	Unit	Year 8	Teacher Assessment	
1	Motion, pressure and Moments	Speed		
2		Distance- time graphs		
3		Forces		
4		Drag investigation		
5				Drag Investigation
6		Terminal velocity		
7		Pressure		
8		Pressure in fluids		
9		Moments		Exam Question