NSM KS3 Science – PROGRAMME OF STUDY STAGE 3				KEY
	Area of study	**Area of study**	**Area of study**	**Area of study**
Prior learning from KS2	**Living things and their Habitats**	**Animals including humans**	**Light and Sound**	**Plants**

Working Scientifically

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments

KS3 Taught content: Knowledge/Skills

Key Stage 3 Science curriculum

Autumn term		Spring term		Summer term	
Lesson	Title	Lesson	Title	Lesson	Title
1	Cells	1	Photosynthesis	1	Reproduction
2	Skeletomuscular system	2	Respiration	2	Health and Disease
3	Digestive system	3	Food chains webs	3	Inheritance
4	Respiratory system	4	Chromosomes genes DNA	4	Variation
5	Solids liquids gases	5	Chemical reactions	5	The periodic table
6	Elements compounds mixtures	6	Combustion and oxidation	6	Reactivity series
7	Diffusion and dissolving	7	Acids and alkalis	7	Earth and rock cycle
8	Separation techniques	8	Acid reactions	8	Atmosphere
9	Energy Resources	9	Balanced unbalanced forces	9	Current electricity
10	Energy stores and transfers	10	Forces and motion	10	Static electricity
11	Light	11	Pressure	11	Magnetism
12	Sound	12	Matter and density	12	Space
13	Experiments				

Topics from NC	
Biology	Objective

Title	NC KS3 Objectives Section covered	B
Cells	Cells and Organisation	1.1-1.6
Skeletomuscular	The skeletal and muscular systems	2.1-2.3
Digestive system	Nutrition and digestion	3.1,3.4
Respiratory system	Gas exchange systems	4.1-4.2
Reproduction	Reproduction	4.5,4.6
Health and Disease	Health/Nutrition and digestion	3.3,5.1
Photosynthesis	Photosynthesis	6.1-6.3
Respiration	Cellular respiration	7.1-7.4
Food chains and webs	Relationships in an ecosystem	8.1-8.3
Chromosomes genes DNA	Inheritance, chromosomes, DNA and genes	9.1,9.2
Inheritance	Inheritance, chromosomes, DNA and genes	9.1,9.2
Variation	Inheritance, chromosomes, DNA and genes	9.4,9.5

Chemistry		Objective
Title	NC KS3 Objectives Section covered	C
Solids liquids and gases	The particulate nature of matter	1.1,1.2
Elements compounds mixtures	Atoms, elements and compounds	2.1,2.2
Diffusion and dissolving	Pure and impure substances	3.2,3.3
Separation techniques	Pure and impure substances	3.4,3.5
Chemical reactions	Chemical reactions	4.1,4.2
Combustion and oxidation	Chemical reactions	4.3
Acids and alkalis	Chemical reactions	4.4,4.5
Acid reactions	Chemical reactions	4.6,4.7
Periodic table	The periodic table	6.1-6.3
Metals and non metals	Materials	6.5,6.6
Earth and rock cycle	Earth and atmosphere	8.1-8.3
Atmosphere	Earth and atmosphere	8.4-8.6

Physics		Objective
Title	NC KS3 Objectives Section covered	P
Energy resources	Calc of fuel uses & costs in domestic context	1.1,1.5
Energy stores and transfer	Energy changes and transfers	2.2,2.3
Light	Light waves	12.2-12.4
Sound	Sound waves	10.2-10.4
Balanced unbalanced forces	Forces	7.1
Forces and motion	Forces and motion	8.1-8.2
Pressure	Pressure in fluids	6.1-6.3
Matter and density	Physical Changes, Particle Model	16.1,16.2,17.1

Current Electricity	Current Electricity	13.1-13.3
Static electricity	Static electricity	14.1-14.2
Magnetism	Magnetism	15.1-15.3
Space	Space physics	19.1-19.3

Working Scientifically		Objective
Title	KS3 Section	WS
Experiments	All	2.3

Subsequent Learning:

RT KS4 Science curriculum derived from National Curriculum – Biology/Chemistry/Physics at greater depth building on content and skills from KS3. Increased scientific understanding of real world including Health, Environment, Independent Investigations with increasing understanding of how to hypothesize. Working towards skills needed for GCSE – AQA skills mapped across the progression of skills.