

Year 7 Sciences Curriculum Map

Subject/Term	Term 1 Knowledge	Term 2 Knowledge	Term 3 Knowledge	Term 4 Knowledge	Term 5 Knowledge	Term 6 Knowledge
Science Rotation of 5 <i>Skills: Scientific thinking; Experimental skills; Analysis and evaluation; Scientific vocabulary</i>	Cells; Particle model; Forces	Human reproduction; Separating mixtures; Energy costs	Variation; Acids and alkalis; Electricity	Interdependence; Metals & non-metals; Friction & energy stores	Rocks; Space	
Geography 5 units covered <i>Skills: Knowledge; Understanding; Enquiry</i>	G1 It's your planet - Origins; Life; Human	G2 Maps and The UK – Skills; Physical; Human	G3 Glaciers – Processes; Landscapes; Landforms	G4 Africa – Countries; Physical; Human	G5 Rivers and Floods – Processes; Landscapes; Landforms	
Maths 9 units covered <i>Skills: Number Place Value & Four Operations; Number FDP & Ratio; Measurement & Units; Geometry, Angles & Shapes; Statistics; Problem Solving & Investigations</i>	Number 1: - Ordering integers and decimals - Working with negative numbers - Four operations, including decimals - Rounding to decimal places - Working with fractions Algebra 1: - Algebraic notation - Collecting like terms - Multiply & divide expressions - Substitution - Expanding brackets Geometry & Data 1: - Properties of 2D and 3D shapes - Perimeter of shapes - Area of shapes (including circles) - Volume of prisms - Pythagoras introduction		Number 2: - Properties of Number - Products of Prime Numbers - Percentage of an amount - Percentage increase and decrease - Writing numbers as percentages Algebra 2: - Writing expressions - Factorising - Solve equations (two step and brackets) - Solve equations (unknown on both sides) - Forming and solving equations Geometry & Data 2: - Two-way tables - Pie charts - Scatter graphs - Averages and range - Mean and mode from a table		Number 3: - Fraction, decimal & percentage conversion - Ordering FDP - Ratio notation - Sharing in a given ratio - Proportion and unitary method Algebra 3: - Working with sequences - Finding nth term for linear sequences - Inequality notation - Solve inequalities (including negatives) - Solve inequalities (unknown on both sides) Geometry & Data 3: - Angle terminology - Scale drawings and constructions - Angles in parallel lines - Angles in polygons - Bearings	

PE 4 units covered <i>Skills include:</i> <i>Teamwork;</i> <i>confidence; Asking questions;</i> <i>Determination;</i> <i>Positive approach to PE; Failure and;</i> <i>Resilience; Leading by example</i>	Tactics and strategies Team Challenges - House sport Team Sports - Netball, football, hockey, handball, rugby, etc.		Technique and performance Athletics Trampolining Gymnastics Fitness		Motor Competence Dance Trampolining Striking and fielding		OAA House Sport Team building activities OAA – Orienteering	
Computing 6 units covered <i>Skills:</i> <i>Computational Thinking; Problem Solving; Analysis, Evaluation and Implementation;</i> <i>Technical Vocabulary; Digital Literacy & Communication</i>	Students learn how to use technology safely, responsibly and effectively. They explore digital footprints, online identity, personal information, secure passwords and privacy settings. Students investigate content, contact and conduct risks, misinformation and the trustworthiness of online information, alongside how to report concerns and access support.	Students learn how hardware and software work together within a computer system. They explore the purpose of key components including the CPU, RAM, storage, input and output devices. Students learn about operating systems and application software and explore the Input–Process–Output model and how devices communicate.	Students learn how algorithms provide a sequence of instructions for solving problems and how these can be implemented in code. Using Scratch, they explore sequencing, selection, repetition and variables, alongside testing and debugging techniques used to identify and correct errors.	Students learn how computers represent information digitally using binary. They explore how numbers and characters are represented and investigate how images and sound can be stored digitally. Students also explore simple encoding and ciphers to understand how information can be represented in different ways.	Students learn the principles of effective digital design and how products are created for a specific audience and purpose. They explore layout, colour, typography and imagery and consider how these choices influence usability, accessibility and the effectiveness of a digital product.	Students learn how websites are structured and designed for a particular audience and purpose. Using drag-and-drop web authoring tools, they explore page structure, navigation, accessibility and usability and learn how testing and evaluation can improve a finished website.		
DTA Rotation of 5 units <i>Skills:</i> <i>Investigation;</i> <i>Analyse; Generate Ideas; Make; Evaluate</i>	DT – Multi-Materials - Metals and working properties, communication techniques, iterative design (design decisions)	DT – Graphic Products - Material classifications and working properties, papers and boards / plastics, CAD and iterative design.	DT – Textiles - Understanding materials and working properties and their source. Developing design ideas with a user in mind. Researching and completing product analysis. Health & Safety.	Art & Design - Formal elements and artist analysis.		Food & Nutrition - Health & Safety, introduction to the food room. Eatwell guide, 8 healthy eating tips, nutrients and food groups.		