EWANRIGG JUNIOR SCHOOL UPPER SCHOOL LONG TERM PLAN CYCLE 2

YEAR 6

	Autumn term		Spring	term	Summer term	
	Ice Trap/ Shackletons	Wolves in the Wall/	Cosmic/Cosmic Disco	The Adventures of	London Eye Mystery	
Texts studied:	Journey	Floodland	(poetry)	Odysseus	Shakespeare	
Writing genres	Diary entry Newspaper report Poetry	Non-chronological report Story from a different perspective	Narative	Narative		
		•				
Maths	Number - number and place value • read, write, order and compare numbers up to 10 000 000 and determine the value of each digit • round any whole number to a required degree of accuracy • use negative numbers in context, and calculate intervals across zero • solve number problems and practical problems that involve all of the above. Number - addition, subtraction, multiplication and division • multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as who number remainders, fractions, or by rounding, as appropriate for the context • divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • perform mental calculations, including with mixed operations and large numbers • identify common factors, common multiples and prime numbers • use their knowledge of the order of operations to carry out calculations involving the four operations • solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • solve problems involving addition, subtraction, multiplication and division • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.					

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions >1
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
- divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $^{3}/_{8}$]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places.
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages including in different contexts.

Ratio and Proportion

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and use percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

Algebra

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy number sentences involving two unknowns
- enumerate possibilities of combinations of two variables

Measurement

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places

- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use the formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³]

Geometry - properties of shapes

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circle, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

Geometry - position and direction

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Statistics

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average

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Earth and Space and magnetism:

- NC- Pupils should be taught to:
- describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Forces

Pupils should be taught to:

• explain that unsupported objects fall towards the Earth

Living things and their habitat

NC-Pupils should be taught to:

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics
- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- describe the life process of reproduction in some plants

Properties and changes

NC-Pupils should be taught to:

- compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering,

	because of the force of gravity acting between the Earth and the falling object • identify the effects of air resistance, water resistance and friction, that act between moving surfaces	and animals Evolution and	sieving and evaporating • give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • demonstrate that dissolving, mixing and changes of state are reversible changes	
	 recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. 	Inheritance		
		Pupils should be taught to: recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda	
History		Ancient Greece (Depth)- History C and Geography C NC-Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources.		
Geography	Planet Earth - Geography C Extreme environments NC-Pupils should be taught to:			

	Locational knowledge					
	locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities					
	identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)					
	Human and physical geograph	у				
	Describe and understand key a	aspects of:				
		ncluding: climate zones, biomes rivers, mountains, volcanoes I the water cycle				
	human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water					
	Geographical skills and fieldwork					
	use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied					
	use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world					
	Net and wall games Pupils should be taught to: • use running, jumping, throwing and catching in isolation and in	Multi skills • use running, jumping, throwing and catching in	Gymnastics Pupils should be taught to: • develop flexibility, strength, technique,	Gymnastics Pupils should be taught to: • develop flexibility, strength, technique,	Striking and fielding • use running, jumping, throwing and catching in isolation and in combination	Striking and fielding • use running, jumping, throwing and catching in isolation and in combination
P.E.	 combination play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and 	isolation and in combination • develop flexibility, strength, technique, control and balance [for example, through athletics	control and balance [for example, through athletics and gymnastics] compare their performances with previous ones and demonstrate improvement	control and balance [for example, through athletics and gymnastics] compare their performances with previous ones and demonstrate improvement	 play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic 	 play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic
	netball, rounders and tennis], and apply basic	and gymnastics]	demonstrate improvement to achieve their personal	demonstrate improvement to achieve their personal	tennis], and apply basic principles suitable for	tennis], and apply bas principles suitable for

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	principles suitable for attacking and defending		best.	best.	attacking and defending	attacking and defending
	arracking and detending					
	Swimming Swimming and water safety In particular, pupils should be taught to: • swim competently, confidently and proficiently over a distance of at least 25 metres • use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] • perform safe self-rescue in different water-based situations.	Swimming Swimming and water safety In particular, pupils should be taught to: • swim competently, confidently and proficiently over a distance of at least 25 metres • use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] • perform safe self-rescue in different water-based situations. Outdoor adventure • take part in outdoor and adventurous activity challenges both individually and within a team	Dance compare their performances with previous ones and demonstrate improvement to achieve their personal best. perform dances using a range of movement patterns	Net and wall games Pupils should be taught to: • use running, jumping, throwing and catching in isolation and in combination • play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending	Athletics Pupils should be taught to: • use running, jumping, throwing and catching in isolation and in combination • develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]	Athletics Pupils should be taught to: • use running, jumping, throwing and catching in isolation and in combination • develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
	Design and make a moo	n buggy		< plate		
	Design and make a shel	lter to survive	Pupils should be taught:	pottery		
	<u>extremities</u>		'	and the standard of the second standard of th		
A rt	When designing and making, p	oupils should be taught to:	 to create sketch books to r use them to review and revi 		Cross hatching charact	ers from Macbeth and
D.T.	Design				other Shake:	speare plays.
5.1.	 use research and develop de 	sign criteria to inform the	to improve their mastery of including drawing painting of	t art and design techniques, and sculpture with a range of		
	design of innovative, functio	nal, appealing products that	materials [for example, pen			
	are fit for purpose, aimed at	t particular individuals or	about great artists, archite			
	around		■ about great artists, archite	cis una designers in history.	1	

• about great artists, architects and designers in history.

groups

 generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Chalk pictures of the planets

Pupils should be taught:

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

• about great artists, architects and designers in history. Christmas crafts: Christmas card WORD PROCESSING E-SAFETY 5.4 ENG MA 6.4 WE ARE INTERFACE WE ARE STATISTICIANS 5.1 WE ARE GAME **5.2 WE ARE** WE ARE CO-AUTHORS PSHCE ART DESIGNERS, PPT-GREECE DEVELOPERS CODING CRYPTOGRAPHERS MA 4.5 WE ARE EXPLORERS ENG GREECE ENG MA ART DT WE ARE HISTORIANS-SCRATCH HIS PSHCE ENG SC GEOG ART DESIG SC GEOG MA MUSIC PSHCE GREECE ENG MA SC ART MUSIC 3.5 WE ARE 5.4-understand computer 4.5 -understand computer *TO CONTOL DEVICES MA ENG HIS GEOG 5.1 design, write and debug COMMUNICATORS FNG networks including the networks including the MA FNG SC -Dunderstand computer programs that accomplish MA SC DT HIS PSHCE ART **5.2** Use logical reasoning to internet; how they can internet; how they can 6.4 -use search networks including the specific goals, including explain how some simple provide multiple services, provide multiple services, technologies effectively, internet; how they can controlling or simulating algorithms work and to such as the world-wide web; such as the world-wide web; appreciate how results are provide multiple services. physical systems; solve detect and correct errors in selected and ranked, and be such as the world-wide web; and the opportunities they and the opportunities they problems by decomposing algorithms and programs. offer for communication and offer for communication and discerning in evaluating and the opportunities they them into smaller parts -understand computer collaboration collaboration digital content offer for communication -use sequence, selection, and networks including the and collaboration - use technology safely, -Dselect, use and combine a -use technology safely. repetition in programs; work internet; how they can respectfully and responsibly; -use search technologies respectfully and responsibly; variety of software with variables and various provide multiple services. recognise recognise (including internet services) effectively, appreciate how forms of input and output such as the world-wide web; acceptable/unacceptable acceptable/unacceptable results are selected and on a range of digital devices -Duse logical reasoning to and the opportunities they behaviour; identify a range behaviour; identify a range to accomplish given goals, ranked, and be discerning in explain how some simple offer for communication and of ways to report concerns of ways to report concerns includina collectina. evaluating digital content algorithms work and to collaboration about content and contact. about content and contact. analysing, evaluating and -🛮 select, use and combine a detect and correct errors in -Use search technologies - use technology safely, -Use search technologies presenting data and COMPUTING variety of software algorithms and programs effectively. effectively, Appreciate how information. respectfully responsibly: (including internet services) -understand computer -use and combine a variety know a range of ways to search results are selected - use technology safely, on a range of digital devices networks including the of software (including report concerns and and ranked and be discerning respectfully and to accomplish given goals, internet; how they can internet services) on a range inappropriate behaviour in evaluating digital content responsibly; know a range of including collecting, provide multiple services. of digital devices to design 3.5-understand computer -select, use and combine a ways to report concerns and analysing, evaluating and such as the world-wide web; and create a range of networks including the variety of software inappropriate behaviour presenting data and and the opportunities they programs, systems and internet; how they can (including internet services) *CONTROL DEVICES information. offer for communication and content that accomplish provide multiple services. on a range of digital devices design, write and debug collaboration given goals, including such as the world-wide web; to accomplish given goals, programs that accomplish collecting, analysing, and the opportunities they **EXPLORERS** -use sequence. specific goals, including evaluating and presenting offer for communication and controlling or simulating selection, repetition in data and information,- use collaboration physical systems; solve programs; work with technology safely. variables and various forms problems by decomposing - use technology safely, respectfully and responsibly; of input and output them into smaller parts respectfully and responsibly; know a range of ways to -be discerning evaluating know a range of ways to -use search technologies report concerns and effectively, appreciate how report concerns and digital content inappropriate behaviour inappropriate behaviour results are selected and -use sequence, selection, ranked, and be discerning in and repetition in programs: evaluating digital content work with variables and

			-select, use and combine a variety of software on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information. - use technology safely, respectfully responsibly know ways to report concerns and inappropriate behaviour	various forms of input and output -Duse logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs			
		2 x music Pupils should be taught to:	afternoons	2 x music Pupils should be taught to:	afternoons	2 x music of Pupils should be taught to:	afternoons
 play and perform in solo and ense voices and playing musical instrum accuracy, fluency, control and exp 		struments with increasing			play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression		
		improvise and compose musi the inter-related dimension.	c for a range of purposes using s of music	improvise and compose music for a range of purposes using the inter-related dimensions of music		improvise and compose music for a range of purposes using the inter-related dimensions of music	
Mu	• listen with attention to detail of increasing aural memory		ail and recall sounds with	listen with attention to detail and recall sounds with increasing aural memory		Iisten with attention to detail and recall sounds with increasing aural memory	
	use and understand staff and a		nd other musical notations	use and understand staff at	nd other musical notations	use and understand staff and	d other musical notations
	appreciate and understand a and recorded music drawn fr from great composers and m			 appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians appreciate and understand a wide and recorded music drawn from from great composers and musicians 		om different traditions and	
		develop an understanding of the history of music.		develop an understanding of the history of music.		develop an understanding of the history of music.	
		SEALS: New Beginnings	SEALS: Getting on and falling out Anti Bullying	SEALS: Going for goals	SEALS: Good to be me	SEALS: Relationship	SEALS: Changes
SMSC	S	School council caps elections Responsibility Cap applications	Olds folks tea Christmas nativity production Ewanriggs Got talent Remembrance Day Firework safety Christmas choir performance	Easter fayre	Rock Challenge	Residential trips	Sports day Summer performance

M	Rights and responsibilities (Assembly) Children's rights The bare necessities Rights and duties Being responsible Peer mentors Resolving disputes Peer pressure Church visit- Nativity Daily worship	The global community (Assembly) Stereotypes Racism Ageism Genderism People with disabilities Asylum seekers EU & UN Human Rights Poverty and inequality Fairtrade Friendships around the world Daily worship Church visit- Easter RE Immersion Day - Responsibility and Duty (AT1 & AT2) Upper School - Sikhism, Buddhism and Christianity		Health (Assembly) Year 5 Feeling good Easing stress A healthy mind Fighting disease Year 6 Growing up Drugs, their use and effects Personal safety Risky behaviour Sex and Relationships education Daily worship Church visit- Presentation assembly RE Immersion Day - Gods/Deities/Important figures (AT1 & AT2) Upper School - Sikhism, Buddhism and Christianity	
s	RE Immersion Day - Sacred Texts and Stories (AT1 & AT2) Upper School - Sikhism, Buddhism and Christianity 10 week block - Art & Symbolism and Life & Death (AT)				
	Upper School - Sikhism, Buddhism and Christianity	··- -,	Upper School - Sikhism, Buddhism and Christianity		
с	Immersion day: Famous British people Churchill Princess Diana Duke of Wellington Queen Victoria Queen Elizabeth 1 st and 2 nd Montgomery British Values Immersion afternoon (Upper School and Lower School)		Residential city visit	ion afternoon (Upper School and Lower School)	
	Democracy, Rule of Law and Individual Liberty				