



		Year 5 Planning Overview	
	Autumn	Spring	Summer
Topic title	Planet Earth	Home from home (Vikings)	Egyptians
Drivers (past present future)	Present: How does the sun affect our everyday life? (time zones, 24 hour lifestyles, farming, daylight hours in different places) Future: How dangerous could the sun become? (sun itself, skin cancers etc, deserts, erosion, bodies of water drying up)	Past: Why did people invade other places? Present: Why do people migrate today? (jobs, war, famine, persecution) Future: Where will everyone go? (if our population continues to grow)	Past: How did the ancient Egyptians improve our world? Present: What has survived from the Ancient Egyptians that we still use today?
Global goals Year B	Reduced inequalities Sustainable cities and communities Responsible consumption and production	Climate action Life below water	Life on land Peace and justice- strong institutions
Visit/ experience linked to the topic	Trip to National Space Centre	Hire actors in – re-enactment, artefacts. Viking school visits.com / Viking Day organised in school.	British Museum Visit & theatre trip (Joseph and his technicoloured dreamcoat) London? OR Museum closer, e.g. Cambridge (Fitzwilliam).
Overall outcome for topic (showcase)			
Hook	VR Headsets to explore space Video of the Moon Landing	Viking Day	
Key Texts	Cosmic- Frank Cottrell Ask an Astronaut: My guide to life in space	Viking Boy by Tony Bradman	Secrets of a Sun King by Emma Carroll My mummy ate my homework by Thiago de Moraes

English/Phonics	Newspaper report Non-Chronological report — Planet Earth/Pandora Biography — Hidden figures (or a character from cosmic) Narrative — Pandora- fantasy story	Recount – link back to Space Centre trip Narrative – starting with the action Discussion report – history outcome Letters - linked to overall topic outcome (letter to MP)	Explanation – Process of Mummification Poetry – Dreadful Menace Recount – Howard Carter's diary (video- Tadeo Jones)
British Values	Democracy Beginning to talk about examples of democracy Take part in a fair vote (House Captains and School councillors) Mutual Tolerance & Respect for Diversity Understands how all people are equal and different (Link to Hidden Figures) Individual Liberty Understands that individual liberty has to be within the rules Talk about some of the UN Children's Rights	Rule of Law • Think about why we have the 'rule of law' • Explore rules, learning their value and purpose	Individual Liberty • Discuss the right to live in freedom and individual liberty Democracy • Beginning to talk about examples of democracy

		Science - Earth and Space	History	History
		National Curriculum Objectives 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	National Curriculum Objectives the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor Britain's settlement by Anglo-Saxons and Scots Pupils should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance	National Curriculum Objectives the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Egypt; Pupils should understand how our knowledge of the past is constructed from a range of sources
		sky.	Granular Knowledge	Granular Knowledge
Focus Subjects	Block 1	Granular Knowledge I know the names of the planets I can describe the movement of the Earth and other planets relative to the Sun I can describe the movement of the Moon relative to the Earth I can describe the Sun, Earth and Moon (using the term spherical) I can explain the movement of the Earth and other planets relative to the Sun I can explain the movement of the Moon relative to the Earth I can explain and demonstrate how night and day are created Greater Depth I can compare the time of day at different places on the earth I can begin to understand how older civilizations used the sun to create astronomical clocks, e.g. Aztecs I can explore the work of some scientists (Ptolemy, Alhazen, Copernicus)	I can test out a hypothesis in order to answer questions I know that the Vikings and Anglo Saxons invaded Britain I can explain how our locality has changed over time I can compare two or more historical periods; explaining things which changed and things which stayed the same Greater Depth I can make connections and comparisons between the past and present through explaining and justifying my reasons •	 I know how to read timelines with centuries and decades I can draw a timeline with different historical periods showing key historical events or lives of significant people I can use different sources to find information about the past I understand some of the key achievements of the Ancient Egyptians I can explain what life was like for the Ancient Egyptians I can use different sources to learn about what life was like for the Ancient Egyptians Greater Depth I can adapt my ideas and viewpoints as new historical information arises

	Subject Outcome 1	Science: Earth and Space Create a 3D model of the Earth, Moon and Sun and the orbital relationships between the two	History: Create a discussion report to compare Vikings and Saxons and their impact on Britain (double page spread?)	History: Create a double page spread to explain the achievements of the Egyptians using evidence gathered from a range of sources
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Block 2

Science - Forces (Gravity)

National Curriculum Objectives

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance and friction, that act between moving surfaces

Granular Knowledge

- I know the vocabulary related to forces
- I can explain what gravity is and its impact on our lives
- I can identify the effect of air resistance
- I can identify the effect of friction
- I can explain the effect of air resistance
- I can explain the effect of friction

Greater Depth

- I can explore how scientists, such as Galileo Galilei and Isaac Newton helped to develop the theory of gravity
- I can describe and explain how motion is affected by forces (including gravitational attractions, magnetic attraction and friction)
- I can design very effective parachutes

Science Living things and their habitats

National Curriculum Objectives

- 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 and animals

Granular Knowledge

- I can describe the life cycle of different living things, e.g. mammal, amphibian, insect bird
- I can describe the differences between different life cycles
- I can describe the process of reproduction in plants
- I can describe the process of reproduction in animals
- I can compare the life cycles of plants and animals in their local environment with the life cycles of those around the world, e.g. comparing a rainforest with a desert

Greater Depth

 When pond dipping, I can identify different species and suggests which stage of the lifecycle they are in (e.g. frog spawn)

Science – Animals – including Humans National Curriculum Objectives

- describe the changes as humans develop to old age
- Pupils should draw a timeline to indicate stages in the growth and development of humans
- They should learn about the changes experienced in puberty

Granular Knowledge

I can create a timeline to indicate stages of growth in humans

Greater Depth

Science – Properties and changes of materials

National Curriculum Objectives

- 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, 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
- 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.

Granular Knowledge

- I know and can demonstrate that some changes are reversible and some are not
- I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets)
- I can describe how a material dissolves to form a solution; explaining the process of dissolving
- I can describe and show how to recover a substance from a solution
- I can describe how some materials can be separated
- I can demonstrate how materials can be separated (e.g. through filtering, sieving and evaporating)
- I can discuss reversible and irreversible changes

Subject Outcome 2	Science: Forces (Gravity) Design a parachute to support a Rocket landing on the moon/ returning to Earth – thinking about shape, size etc	Science: Living Things Compare how reproduction rates are changing for different species (e.g. endangered animals and baby booms)	Science: (Chemical Changes) use knowledge of solids, liquids and gases to filter dirty water: who can make the cleanest water?
		I can create a timeline to indicate stages of growth in certain animals, such as frogs and butterflies I can describe the changes experienced in puberty I can draw a timeline to indicate stages in the growth and development of humans	 I can give evidenced reasons why materials should be used for specific purposes I can explain how some changes result in the formation of a new material and that this is usually irreversible Greater Depth I can describe methods for separating mixtures (filtration, distillation) I can work out which materials are most effective for keeping us warm or for keeping something cold I can use my knowledge of materials to suggest ways to classify (solids, liquids, gases) I can explore changes that are difficult to reverse, e.g. burning, rusting and reactions such as vinegar with bicarbonate of soda I can explore the work of chemists who created new materials, e.g. Spencer Silver (glue on sticky notes) or Ruth Benerito (wrinkle free cotton)

Block 3

Geography

National Curriculum Objectives Locational knowledge

- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers)
- identify the position and significance of equator & Northern and Southern hemisphere

Human and physical geography describe and understand key aspects of:

physical geography, including: vegetation belts and mountains

Granular Knowledge

- I can use some basic Ordnance Survey map symbols
- I know how to use an atlas
- I can name and locate many of the world's most famous mountainous regions in an atlas
- I know the features of a vegetation belt and how mountains are formed
- I can plan a journey to a place in another part of the world, taking account of distance and time
- identify the position and significance of equator & Northern and Southern hemisphere
- I can identify land use patterns and I can understand how some of these have changed over time
- I can use maps and atlases to identify the position and significance of the equator and north and southern hemisphere

Greater Depth

Geography

National Curriculum Objectives Place knowledge

 understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom

Geographical skills and fieldwork

 use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Granular Knowledge

- I can explain how a location fits into its wider geographical location with reference to human and economical features
- I can identify features of regions in the UK including rivers and mountains
- I can compare physical and human geographical similarities and differences when studying a region of the United Kingdom
- I can name and locate some counties that are part of the United Kingdom using maps and atlases
- I can use fieldwork to observe measure and record the human and physical features in the local area
- I can use Sketch maps, plans, graphs and digital technologies to present my findings

Greater Depth

 I can rank geographical information in order of importance, justifying their viewpoints and adapt thinking as new geographical information arises
 I can evaluate geographical information/sources and draw appropriate conclusions

Geography:

National Curriculum Objectives Human and physical geography describe and understand key aspects of:

physical geography, including: rivers

Granular Knowledge

- I can name and locate many of the world's most famous rivers in an atlas
- I can explain why many cities are situated on or close to rivers
- I can explain why people are attracted to live by rivers
- I can explain the course of a river

Subject Outcome 3	Geography: create a fact file about the physical features of our planet: what makes up our Earth?	Geography: Present a 'Location, Location, Location' style video to persuade a Viking where is best to settle (Horrible Histories style)	Geography: create an explanation video to accompany a presentation to explain how a river is formed
Block 4		Science - Forces National Curriculum Objectives identify the effects of water resistance and friction, that act between moving surfaces recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect Granular Knowledge I can identify the effect of water resistance I can explain the effect of friction I can explain the effect of friction I can explain how levers, pulleys and gears allow a smaller force to have a greater effect Greater Depth I can work out how water can cause resistance to floating objects	
Subject Outcome 4		Science: Forces Modify a basic ship design to make the fastest ship to move through water, considering water resistance and levers (oars)	

RE Unit	Christianity:	Sikhism:	Sikhism:
	To know how Christians make a difference with the problems in the UK today.	 To explore what happens in Sikh celebrations. To know what Sikhs believe about God and creation (Visit a Gudwara?) 	To know why the Seva (selfless service) is an important aspect of human life.
D&T	Food Celebrating culture and seasonality	Research frame structures Investigate and make annotated drawings of existing frame structures Discuss the brief of designing and making a small-scale frame structure (bird hide / camouflaged shelter) Demonstrate skills and techniques for making successful joins (using art straws, pipe cleaners, paper etc) Develop an understanding of how triangulation adds strength to framework structures. Use research and knowledge to design a small-scale model of a framework in line with the design brief and provide a step by step plan for making. Make products with accuracy, evaluate and consider fit against purpose and end user.	Mechanical Systems (cams)
Art	Autumn 1 Debussy — great wave (printing) Explore the printing technique, work and world of Japanese artist Katsushika Hokusai with a focus on The Great Wave (1830) Identify and draw features of the natural world and use marks and lines to add detail and texture Compare a variety of wave representations by artists (Claude Monet, Pierre-Auguste Renoir, William Turner, Vanessa Mae) to inspire their own work	M.C. Escher.	Summer Birds in Ancient Egyptian Art (clay) • Learn about Ancient Egyptian art with a focus on the symbolism of birds. • Investigate sketching birds in motion and birds in still frame from a photo. • Understand a profile image and sketching birds mainly in profile.

	following criteria Know how to create a printing block in two ways, using string and styrofoam Know that this method of printing requires a thick printing ink Know how to combine a print with other media Use the string block to create a wax resist image (wax candle and watercolour) and print Use printing tools, appropriate pressure and control to create clean prints Autumn 2 Abstract art — a view from above (digital media) Know how to use digital media (Google Earth) and view an object from an aerial perspective. Understand the term 'abstract'. Know about the artist Yann Arthus-Bertrand and his work in aerial photography. Appraise and improve their work by re-looking back at their own sketches. Learn how to enlarge their drawing using the grid method. Understand how to move from 2D to 3D in their artwork.	and create different tones. Develop their understanding of tone and shading during initial sketches. Understand how to produce a repeating pattern/tessellation in the style of M.C. Escher. Spring 2 Munch — expression and emotion Learn about the artist, Edvard Munch and his link to Expressionism. Investigate the Brücke group and discuss Expressionism artists. Know how to appraise art and research an artist and know their key works. Know how to mark make in an expressionistic way and use different tools and techniques to create effects. Reflect on their art journey and explain how an image makes them feel. Learn how to sketch a portrait showing emotion and how to create tension in a piece. Develop use of charcoal, pastel and oil pastel techniques.	effect of contrasting lighter areas with darker areas to develop depth in drawings. Make observational sketches and develop tone and shading. Make preliminary sketches in preparation for a clay etching in the style of an Ancient Egyptian stone carving. Develop clay making techniques including slips, rolling, carving and decoration.
Computing	Autumn 1 Sharing information Explain that computers can be connected together to form systems Recognise the role of computer systems in our lives Recognise how information is transferred over the internet Explain how sharing information online lets people in different places work together Contribute to a shared project online Valuate different ways of working together online Autumn 2 Vector drawing	Spring 1 Selection in Physical Computing	Flat file databases Use a form to record information Compare paper and computer-based databases Outline how grouping and then sorting data allows us to answer questions Explain that tools can be used to select specific data Explain that computer programs can be used to compare data visually Apply my knowledge of a database to ask and answer real-world questions Summer 2 Selection in quizzes

Identify that drawing tools can be used to produce Explain how selection is used in computer Video editing different outcomes programs Explain what makes a video effective Create a vector drawing by combining shapes Relate that a conditional statement connects a Use a digital device to record video Use tools to achieve a desired effect condition to an outcome Capture video using a range of techniques Recognise that vector drawings consist of layers Explain how selection directs the flow of a Create a storyboard Group objects to make them easier to work with program Identify that video can be improved through Design a program which uses selection Evaluate a vector drawing reshooting and editing Create a program which uses selection Consider the impact of the choices made when Evaluate a program making and sharing a video E-Safety Autumn 1 Spring 1 Summer 1 **Online Reputation Self Image and Identity Managing Online information** Explain how identity online can be copied, modified Explain what is meant by 'being sceptical'; I can Search for information about an individual online give examples of when and why it is important to and summarise the information found. or altered. Demonstrate how to make responsible choices about be 'sceptical'. Describe ways that information about anyone having an online identity, depending on context. Explain the benefits and limitations of using online can be used by others to make judgments different types of search technologies e.g. voiceabout an individual and why these may be **Online Relationships** activation search engine. I can explain how some incorrect • Give examples of technology-specific forms of technology can limit the information I am **Online Bullving** communication presented with. Explain that there are some people I communicate Recognise online bullying can be different to Evaluate digital content and can explain how to with online who may want to do me or my friends bullying in the physical world and can describe make choices about what is trustworthy e.g. some of those differences. differentiating between adverts and search Recognise that this is not my / our fault. Describe how what one person perceives as Describe some of the ways people may be involved in playful joking and teasing (including 'banter') Explain key concepts including: information, online communities and describe how they might might be experienced by others as bullying. reviews, fact, opinion, belief, validity, reliability collaborate constructively with others and make explain how anyone can get help if they are and evidence. positive contributions being bullied online and identify when to tell a Online Bullying Explain how someone can get help if they are having trusted adult. problems and identify when to tell a trusted adult. Explain how to block abusive users. Explain how anyone can get help if they are being bullied online and identify when to tell a Describe the helpline services which can help people experiencing bullying, and how to access trusted adult. Autumn 2 them (e.g. Childline or The Mix). Identify a range of ways to report concerns and Health, Wellbeing and Lifestyle access support both in school and at home about Spring 2 Recognise the benefits and risks of accessing online bullying. Managing online Information information about health and well-being online and Summer 2 Identify ways the internet can draw us to how we should balance this with talking to trusted Copyright and ownership information for different agendas, e.g. website adults and professionals.

Explain how and why some apps and games may

in-app purchases, lootboxes) and explain the

request or take payment for additional content (e.g.

notifications, pop-ups, targeted ads

Describe ways of identifying when online content

has been commercially sponsored or boosted,

Assess and justify when it is acceptable to use

the work of others

	 Privacy and security Explain what a strong password is and demonstrate how to create one. Explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. Explain what app permissions are and can give some examples. 	content creators, influencers). • Explain what is meant by the term 'stereotype', how 'stereotypes' are amplified and reinforced online, and why accepting 'stereotypes' may influence how people think about others. • Describe how fake news may affect someone's emotions and behaviour, and explain why this may be harmful • Explain what is meant by a 'hoax'. I can explain why someone would need to think carefully before they share. Wellbeing and Lifestyle • Describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. • Describe some strategies, tips or advice to promote health and wellbeing with regards to technology.	reused and know how this content can be found online. Time to revisit based on assessments
PSHE	Autumn – Relationships	Spring- Living in the Wider World	Summer- Health and Wellbeing
	Families and friendships Understands what makes a healthy friendship and how they make people feel included • about peer influence and how it can make people feel or behave • strategies to manage peer influence and the need for peer approval e.g. exit strategies, assertive communication • that it is common for friendships to experience challenges • strategies to positively resolve disputes and reconcile differences in friendships NSPCC WORKSHOP/Protective Behaviours to identify what physical touch is acceptable, unacceptable, wanted or unwanted in different situations • how to ask for, give and not give permission for physical contact • how it feels in a person's mind and body when they are uncomfortable	Belonging to a community about how resources are allocated and the effect this has on individuals, communities and the environment the importance of protecting the environment and how everyday actions can either support or damage it about the way that money is spent and how it affects the environment Media literacy and Digital resilience Covered throughout e-safety Money and work Identify jobs that they might like to do in the future	 Knows about the difference between positive risk taking and dangerous behaviour knows how to deal with common injuries using basic first aid techniques Knows about healthy sleep strategies Understands occasions where they can help take responsibility for their own safety Knows about how to manage risk in relation to sun exposure, including skin damage and heat stroke Know that bacteria and viruses can affect health and can discuss how to avoid spreading germs with good hygiene routines Understands their personal identity Can recognise, understand, respect and discuss the individuality and different qualities of themselves and others
	• that it is never someone's fault if they have experienced	about the role ambition can play in achieving a future career.	Knows how to identify external genitalia and reproductive organs

(e.g. by commercial companies or by vloggers,

• Give examples of content that is permitted to be

reproductive organs

importance of seeking permission from a trusted

unacceptable contact

future career

 how to respond to unwanted or unacceptable physical
contact
• that no one should ask them to keep a secret that makes
them feel uncomfortable or try to persuade them to keep a

secret they are worried about
• whom to tell if they are concerned about unwanted physical contact

Linked to Hidden Figures work

- Understands what discrimination means and discuss different types of discrimination
- Knows that everybody should be treated fairly

Hello Yellow Day

 About the link between participating in interests, hobbies and community groups and mental wellbeing

- about what might influence people's decisions about a job or career, including pay, working conditions, personal interests, strengths and qualities, family, values
- about stereotyping in the workplace, its impact and how to challenge it • that there is a variety of routes into work e.g. college, apprenticeships, university, training