

Curriculum Map Eagles Year 4 & 5 – YEAR B 2024 - 2025

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Topic Name	JOURNEY THROUGH TIME		AMAZING AMAZON		CHINA!	
Science	Year 4 <u>Term 1: Animals including humans</u> Key question - What do our bodies do with the food we eat? <u>Sticky Knowledge</u> - I know the body breaks down food into smaller molecules for energy and excretes waste. - I know digestion involves the mouth, oesophagus, stomach, small intestine, large intestine, gallbladder, pancreas, and liver. - I know there are four types of teeth: incisors for cutting, canines for tearing, and molars & premolars for grinding and chewing. - I know food is broken down in the mouth with teeth; enzymes in the stomach further digest it, while the intestines absorb nutrients and water. - I know living things are classified as producers, predators, and prey in the food chain, starting with a producer. - I know humans impact food chains through pollution, habitat destruction, overfishing, and increased demands for food and shelter, alongside population growth. <u>Disciplinary knowledge</u> - I record my findings in different ways including using simple scientific language and labelled diagrams. - I am beginning to answer different questions independently. I can suggest when a secondary source may be needed. - I use secondary sources. <u>Term 2: Electricity</u> Key question – Can we control electricity? <u>Sticky Knowledge</u> - I know electricity is formed from the flow of electrons and created by generators powered by gas, coal, oil, wind, or solar. - I know electricity can be dangerous; caution is necessary when using electrical appliances. - I know that a circuit consists of a power source, wires, and components like bulbs or buzzers. - I know electricity only flows through a complete circuit; an open switch breaks the circuit and stops the flow. - I know conductors are materials that allow electricity to pass through easily; metals like copper, iron, and steel are good conductors. - I know insulators are materials that do not permit electricity to pass through; plastic, wood, glass, and rubber are good insulators. <u>Disciplinary knowledge</u>		Year 4 <u>Term 1 and 2: Sound</u> Key question - How do we hear sound? <u>Sticky Knowledge</u> - I know that sound is made when objects vibrate. - I know the vibration pass through a medium (solid, liquid or gas) from the source to our ears. The vibrations cause parts of our ear to vibrate and we hear (sense) the sound. - I know that if the vibrations are strong, then the sound is loud and if the vibrations are weak, then the sound is quiet. - I know that sound becomes fainter when you travel further away from the source. - I know if an object vibrates quickly we hear a high-pitched sound and if an object vibrates slowly we hear a low-pitched sound. - I know how musical instruments make sounds; sounds can be made by twanging a string or an elastic band, blowing down a pipe, or banging something together, and scraping or shaking something. <u>Disciplinary knowledge</u> - I carry out comparative tests (e.g. Which material is best to use for muffling sound in ear defenders?). - I plan comparative test independently or in a small group. - I give reasons why variables need to be kept the same in an enquiry. - I make systematic observations and use my data to identify patterns. - I use a range of equipment.		Year 4 <u>Term 1: States of Matter</u> Key question – How can we change the state of water? <u>Sticky Knowledge</u> - I can list the 3 states of matter: solid, liquid and gas; and group material according to their state. - I can describe the properties of each state: solids keep their shapes and have fixed volumes; liquids have a fixed volume but change shape to fit a container; gases have no fixed shape or volume and fill all available space. - I know that melting is a state change from solid to liquid and it happens with heating. Water melts at 0°C. - I know that freezing is a state change from liquid solid that happens with cooling. Water freezes at 0°C. - I know that boiling and evaporation are the state change from liquid to gas and occur with heating. Boiling happens when a liquid is heated to a specific temperature (100°C for water), bubbles of gas form in the liquid. Evaporation happens more slowly, at lower temperatures, at the surface of a liquid. - I can describe how rain is formed: water vapour rises in the atmosphere and there it cools down and forms tiny water droplets these droplets are formed through condensation; the droplets combine together to form clouds; when clouds become too heavy to stay in the air, the droplets fall as rain. <u>Disciplinary knowledge</u> - I use a range of equipment accurately including thermometers. - I use standard units for measurements (oC, g). - I follow a given plan to set up a fair test (e.g. How does the mass of a block of ice affect how long it takes to melt?). - I identify ways I could improve my enquiry by asking further questions or extending the enquiry <u>Term 2: Living things and their habitats</u> Key question – What different groups do animals belong to? <u>Sticky Knowledge</u> - I know that living things can be grouped based on their features. - I know living things exist in habitats suitable for them. - I know habitats can change naturally or due to human actions, both positively and negatively. - I know key characteristics of vertebrates include a backbone and a hard skeleton made of bone. - I know major groups of vertebrates are fish, amphibians, reptiles, birds, and mammals.	

	- I carry out pattern seeking enquiries (e.g Which room has the most electrical sockets in a house?) - I decide how to gather evidence to answer a questions using a range of given resources. - I identify the enquiry type chosen. - I communicate my findings in a variety of ways using both oral and written communication.		- I know key characteristics of invertebrates include they do not have a backbone. - I know some invertebrates have soft bodies (e.g., worms, slugs, jellyfish). - I know other invertebrates (e.g., insects, spiders, crustaceans) have a hard outer casing called an exoskeleton. - I know exoskeletons protect the bodies of invertebrates. <u>Disciplinary knowledge</u> - I classify using tables, Venn diagrams, Carroll diagrams and classification keys. - I use a range of different question stems independently. - I compare objects using my own observations to classify, group and identify. - I record my findings using keys.
Science (cont.)	Year 5 <u>Term 1: Properties and changes of materials</u> Key question – Why do different materials have different jobs? <u>Sticky Knowledge</u> - I can compare materials based on the following properties: hardness, transparency, electrical conductivity, thermal conductivity, solubility, attraction to magnets. - I can group together materials based on the following properties: hardness, transparency, electrical conductivity, thermal conductivity, solubility, attraction to magnets. - I can explain why different materials have different jobs depending on their properties and their state (solid, liquid and gas). - I can describe how changes of state are reversible changes. - I can describe some changes, that make new products, that are irreversible e.g. when bicarbonate of soda and vinegar are mixed together or when wood is burnt. <u>Disciplinary knowledge</u> - I decide whether a question can be answered by enquiry or research. - I investigate using comparative tests (e.g. Which material keeps a cup of tea warmest?). - I identify which variable to change and which to measure, I also make suggestions for what to keep the same. - I use my observations and data from enquiries to suggest answers to questions. - I am beginning to identify patterns in my results and identify results that don't fit the pattern. <u>Term 2: Properties and changes of materials</u> Key question – Why are some changes to materials reversible and others not? <u>Sticky Knowledge</u> - I know that materials can be separated using different methods. - I know that a mixture is formed when two or more substances are mixed physically. - I know that dissolving is when a substance, usually a solid, fully mixes into a liquid. Dissolving does not	Year 5 <u>Term 1: Living things and their habitats</u> Key question – How do plants reproduce? <u>Sticky Knowledge</u> - I know that plants and animals reproduce as part of their life cycles. - I know that most animals reproduce sexually. - I know that asexual reproduction involves only one parent and sexual reproduction involves two parents. - I know that bulbs, tubers, runners and plantlets are examples of asexual reproduction in plants. - I can describe how sexual reproduction occurs in plants through pollination (wind or animal dispersal of seeds). <u>Disciplinary knowledge</u> - I ask my own scientific questions independently. - I record and present evidence using labelled scientific diagrams (e.g. to explain pollination). I use relevant scientific language and illustrations. - I choose how to gather evidence to answer a scientific question. I choose resources from a wide range of given resources. <u>Term 2: Animal including humans (& Living things)</u> Key question – How are the life cycles of different groups of animals similar and different? <u>Sticky Knowledge</u> - I know that a gestation period is the length of time an animal is pregnant for. - I know that a baby grows inside the mother rapidly. - I know that babies are very dependent on their parents when they are young. - I know that when a human reaches adolescence, puberty causes bodies to change physically and sexually. This change enables adults to reproduce. - I know that some animals have live young, some lay eggs and some go through a further change before adulthood called metamorphosis. - I can compare and contrast the life cycle of a mammal, an amphibian, an insect and a bird. <u>Disciplinary knowledge</u> - I make suggestions about which scientific enquiry type is most appropriate to answer a question (e.g. Is there a	Year 5 <u>Term 1: Earth and space</u> Key question – What is in our solar system? <u>Sticky Knowledge</u> - I know that the sun is a star. - I know that there are 8 planets which orbit the sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus & Neptune. - I know the Earth takes 365 $\frac{1}{4}$ days to orbit the sun once, we call this a year. - I know that we have seasons because of the Earth's tilt. - I know that the Earth takes 24hrs to rotate (spin) on its axis and we call this a day. It is this rotation that causes day and night. - I know the moon has 4 phases: New moon, 1st quarter, full moon & 3rd quarter. - I know that the sun, Earth and moon are all approximately spherical in shape. <u>Disciplinary knowledge</u> - I am beginning to understand identify how new discoveries change scientific understanding. - I record observations using labelled diagrams or writing. - I communicate my findings to an audience using a variety of written and oral forms of communication including display and other presentations. <u>Term 2: Forces</u> Key question – What can forces do? <u>Sticky Knowledge</u> - I know that a force causes and object to start moving, stop moving, speed up, slow down or change directions. - I know that gravity is a force that pulls things to the ground on Earth (and other planets). I know that Sir Isaac Newton was famous for his work on gravity. - I know that air resistance, water resistance and friction are examples of forces that act between two moving surfaces. - I know that balanced forces act in opposite directions with the same size and that the object will not move as a result. - I know that a lever is a long, sturdy body that rests on a support called a fulcrum.

	change a substance it just breaks it up into smaller particles that we cannot see. • I know that when a substance is saturated, no more of the substance will be dissolved and I will see particles floating on the surface. • I can use my knowledge of properties of materials and states of matter to suggest how to separate mixtures. <u>Disciplinary knowledge</u> • I carry out fair test enquiries choosing the resources needed from a range of given resources. (e.g. How does the temperature of tea affect how long it takes for a sugar cube to dissolve?) • I identify which variable to change and which to measure and makes suggestions of some variable to keep the same. • I present my data in different ways including in line graphs and I am beginning to identify causal relationships in enquiries. • I use a variety of standard measures confidently. • I am beginning to use my results to make predictions I can investigate using comparative and fair tests.	relationship between a mammal's size and its gestation period?)	<u>Disciplinary knowledge</u> I make systematic and accurate observations and measurements. I record observations using annotated photographs, observations drawings. • I select appropriate equipment for the enquiry type and consider how precise the equipment is. • I select which observations and measurements to take. • I am beginning to present data in different ways to help answer questions.
History	Key question – How has Gloucester changed over time? National Curriculum link: a local history study e.g. a study over time tracing how several aspects of national history are reflected in the locality. STICKY KNOWLEDGE: • I know that Gloucester has been a major settlement for over 2000 years. • I know that the Romans built a large settlement called Glevum in this location as it was a good place to cross the River Severn into Wales. • I know that Ethelfleda, the daughter of King Alfred the Great, developed the city in the Anglo-Saxon period. • I know that the Domesday Book records Gloucester as having equal status to London. • I know that the docks and canal made Gloucester a centre for trade.	Key question – How did the Maya people build a civilisation in the rainforest? National Curriculum link: a non-European society that provides contrasts with British history: Mayan civilization c. AD 900 STICKY KNOWLEDGE: • I know the Maya Civilisation was from 2000 BCE to 1600 CE and was located in Central America. • I know the Maya people developed advanced writing and number systems. • I know they built cities, pyramids and ornate sculptures in the rainforest. • I know that maize was very important to the Maya people as they believed that the first humans were made from maize dough by the gods. • I know the Maya people drank cacao and used cacao beans as a form of currency.	Key question - What were the greatest achievements of the Shang Dynasty? National Curriculum link: 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: The Shang Dynasty of Ancient China STICKY KNOWLEDGE: • I know that the Shang Dynasty was from 1600 BCE to 1046 BCE and it was located in China. • I know that the discovery of Fu Hao's tomb enabled historians to learn more about the Shang Dynasty. • I know that the Shang were the first Chinese to develop a form of writing. • I know that the Shang used cowrie shells as a form of currency. • I know that Shang society was organised into a social hierarchy.
Geography	Key question: What makes a good place to live? National Curriculum link: identify types of settlement and land use patterns; and understand how some of these aspects have changed over time; economic activity including trade links STICKY KNOWLEDGE: • I know that many UK settlements have existed for thousands of years, created by early settlers like the Romans, Vikings and Anglo-Saxons.	Key question – Why is the Amazon Rainforest so important? National Curriculum link: Pupils should extend their knowledge and understanding beyond the local area to include ... South America. This will include the location and characteristics of a range of the world's most significant human and physical features. STICKY KNOWLEDGE: • I know that all tropical rainforests are located between the Tropic of Cancer and the Tropic of Capricorn.	Key question – Why is so much made in China? National Curriculum link: locate the world's countries, concentrating on their environmental regions, key physical and human characteristics, and major cities; human geography, including: economic activity including trade links STICKY KNOWLEDGE: • I know that China is the third largest country in the world. • I know that China is the most populated country in the world.

	- I know the key features of a village, a town and a city. - I know why people may choose to live in cities. - I know that Thrupp was originally a village but has now merged with Stroud town. - I know that land can be used for many things including agriculture, housing, industrial, business, leisure and retail.		- I know that the Amazon Basin is located in South America - I know that the Amazon rainforest is the largest rainforest on earth – it is over half the size of Europe. - I know that Manaus is a city in the heart of the Amazon rainforest - I know that deforestation is a threat to the Amazon rainforest and can give some reasons why.		- I know that China has a diverse physical geography and I can use an atlas to locate these different landforms. - I know what import and export mean. - I can explain some reasons for China's economic growth.	
Computing	PURPLE MASH Online safety	PURPLE MASH Spreadsheets (Year 4 and 5)	PURPLE MASH Animation (Year 4)	PURPLE MASH Game Creator (Year 5)	PURPLE MASH Effective Searching (Year 4)	PURPLE MASH Using External Devices (Year 5)
Art/Design	ACCESS ART 2D drawing to 3D making		ACCESS ART Mixed media land and city scapes		ACCESS ART Using art to explore global issues	
DT	KAPOW Food: What could be healthier? (Y5)		KAPOW Textiles: Fastenings – book sleeve (Y4)		KAPOW Electrical systems (Y4) Structure: Pavilions (Y4)	
RE	GLOUCESTERSHIRE RE SYLLABUS L2.9 How do festivals and worship show what matters to a Muslim?	GLOUCESTERSHIRE RE SYLLABUS U2.3 Why do Christians believe Jesus was the Messiah?	GLOUCESTERSHIRE RE SYLLABUS L2.2 What is it like for someone to follow God?	GLOUCESTERSHIRE RE SYLLABUS U2.9 Why is the Torah so important to Jewish people?	GLOUCESTERSHIRE RE SYLLABUS U2.4 How do Christians decide how to live? What would Jesus do?	GLOUCESTERSHIRE RE SYLLABUS U2.11 Why do some people believe in God and some people not?
PHSCE	<u>Me and My Relationships</u> Year 4: An email from Harold! Different feelings Under pressure Year 5: Relationship cake recipe Our emotional needs Being assertive	<u>Valuing Differences</u> Year 4: That is such a stereotype! Friend or acquaintance? Islands Year 5: The land of the Red People Is it true? Stop, start, stereotypes	<u>Keeping Myself Safe</u> Year 4: Raisin challenge (2) Picture wise Medicines: check the label Year 5: Ella;s diary dilemma Vaping: healthy or unhealthy? Would you risk it?	<u>Rights and Responsibilities</u> Year 4: In the news! Safety in numbers Why pay taxes? Year 5: Rights, respect and duties Spending wisely Lend us a fiver!	<u>Being my Best</u> Year 4: Harold's Seven Rs My school community (1) Basic first aid Year 5: Independence and responsibility Star qualities? Basic first aid, including Sepsis Awareness	<u>Growing and Changing</u> Year 4: Changes – Lifecycle Changes – Responsibility Personal Hygiene – Antibiotics Challenging Stereotypes <u>Secret or Surprise? Together (SCARF lessons)</u> Year 5: Changes – Physical Changes – Emotional Personal Hygiene – Keeping Clean Genetic Inheritance

PE	Y5 Forest School Y4 Gym (Y5/6 ATLAS) ATLAS - Principles of Play (KS2)	Dance: Country Dancing ATLAS - Netball (KS2)	Y4 Forest School Y5 Gym (VS Bridges & Flight unit U) ATLAS - Tag Rugby (KS2)	Dance: Year B – Rivers or Spirit of the Forest (SS) ATLAS - Hockey (KS2)	ATLAS - Lacrosse (KS2) ATLAS - Healthy Heart (Y5/6)	ATLAS - Athletics (Y5/6) ATLAS -Cricket (KS2)
Music	CHARANGA Musical Structures (Y4) CLARINET BTBF	CHARANGA Sing and Play in Different Styles (Y5) Christmas Carol Concert	CHARANGA Compose with your Friends (Y4)	CHARANGA Enjoying Musical Styles (Y5)	CHARANGA Expression and Improvisation (Y4)	CHARANGA Battle of the Bands (Y5) KS2 Production