HARROW GATE PRIMARY ACADEMY



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Curriculum Intent



All adults in school understand how children absorb, process, and retain knowledge during learning. HGPA staff recognise how cognitive, emotional, and environmental influences, as well as prior experience, all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills retained.



Our curriculum strives to improve the cultural capital of our children.



Vocabulary: "The limits of my language means the limits of my world"

Ludwig Wittenstein 1921

Language is at the heart of our curriculum. We are committed to reducing the word gap throughout school.





Taught sessions are designed using Rosenshine's Principles of Instruction. HGPA regard this as the best, most clear and comprehensive guide to evidence informed teaching.

> KNOWLEDGE: Our curriculum is build on the principals of Declarative and Procedural knowledge. Declarative - to know that Procedural - to know how



Memory:

Our curriculum aims to improve long term memory, 'If nothing has been changed in long-term memory, nothing has been learned' Kirschner, Sweller and Clarke



Building on prior learning & learning links: In our curriculum new learning is constructed on prior knowledge. Learning is semantic and the curriculum enables the children to build on a firm foundations.





Progress in all subjects: The curriculum is built upon a progress model that ensures that the children develop and improve their declarative and procedural knowledge in all subjects.





Community:

Our curriculum success is dependent on the community we serve. We continue to foster positive relationships with parents and carers as we learn together.

Evolution:

Our curriculum is designed to meet the changing needs of both our children and our world. Our curriculum is reviewed yearly and evolves to ensure authenticity, relevance and freshness! Harrow Gate Primary curriculum - KNOWLEDGE

Pupils need to know stuff and the minimum standards for that stuff are expressed in the National Curriculum documents for each subject. At Harrow Gate we have designed a curriculum that enables children to acquire knowledge, interrogate this knowledge and discuss it all through their school life.

Knowledge is categorised by: Declarative Knowledge and Procedural knowledge.

Declarative Knowledge refers to facts or information stored in the memory that is considered static in nature. Declarative Knowledge also referred to as conceptual, propositional or descriptive knowledge, describes things, events, or processes, their attributes, and their relation to each other.

Procedural Knowledge refers to the knowledge of how to perform a specific skill or task, and is considered knowledge related to methods, procedures, or operation of equipment. Procedural knowledge is also referred to as Implicit Knowledge, or knowhow.



https://www.aft.org/periodical/american-educator/spring-2006/how-knowledge-helps

At Harrow Gate we are proud of our community, realising all of the knowledge from our local area and environment is mapped into all aspects. Children at Harrow Gate increase their lexicon beyond their immediate influences through the careful planning of every teaching and learning opportunity. Not only knowing many words, but also knowing the meaning of those words. The children acquire an understanding of subtle differences in meaning between similar words, which in turn expands their ability to think in a more nuanced way.

We hope that our curriculum has been designed to be inclusive and challenge longstanding biases and omissions that limit how we understand politics and society.

An inclusive and non-Eurocentric curriculum is something we strive for yet we have a lot to learn! We acknowledge that this must be more than the 'token' inclusion of BAME authors in our canon, library and classrooms, but an underlying transformation from a culture of denial and exclusion to a consideration of different traditions of knowledge.



Planning process at Harrow Gate Primary Academy



ENGLISH CURRICULUM

Literacy opens greater opportunities in life and extends life expectancy. The findings outlined in the 2018 Literacy and Life Expectancy report by the National Literacy Trust has ensured that at Harrow Gate Academy there is a strong focus on all children achieving the expected standard or higher in all areas of English.

"A boy born in Stockton Town Centre has a life expectancy of 64 years; 26.1 years shorter than a boy in North Oxford"

Literacy and Life Expectancy 2018 (p.27).

English teaching is at the heart of the Harrow Gate Academy curriculum and all taught English sessions follow The Centre for Literacy in Primary Education's Power of Reading rationale and teaching sequences. This ensures that our children are given the opportunity to read a wide and diverse range of high quality texts and use their developing encoding skills to write in a variety of ways across the whole school curriculum.

Our English curriculum is designed around the use and shared appreciation of high quality texts which continuously support children's developing reading and writing skills, and identity. Children's implicit and explicit knowledge of language, vocabulary and grammar is continually stretched through the quality, breadth and range of texts being read aloud, reread, discussed and performed.



Through social engagement around high quality texts and through the rich discussions which ensue, children are able to think increasingly about the pragmatic choices made by professional writers and the effect those choices might have upon the reader and are then able to emulate this in their own work.

We also use the Scarborough Reading Rope to direct the design of our English curriculum; ensuring that consideration has been given to each strand at every stage of the children's development.



• Our HGPA Curriculum has been designed to improve and enhance background knowledge as our children progress through school.

Vocabulary:

 We use vocabulary organisers to facilitate the explicit pre teaching of tier and two and three words as we try to improve the HGPA lexicon. These words are extended with activities in word class, synonymy, homonymy and colocation. Vocabulary organisers are also shared with parents and carers to encourage extending words knowledge with the wider community.

Language Structures:

• Our judicious and consistent use of high quality texts ensure that children are exposed to sophisticated syntactic structures. They hear these daily and replicate them in both their booktalk and their written work.

Literacy Knowledge:

 Literacy knowledge grows through our dedication to 'reading for pleasure', well stocked classroom book areas, library time, daily ERIC time and the investigation of multi modal primary and secondary sources across the wider curriculum.

Sight Knowledge:

• We ensure that the explicit teaching of sight words is a priority; ensuring that spelling-to-sound irregularity does not hinder progression in reading and spelling as children master the reading and writing of the alphabetic system.

Decoding and Phonological Awareness:

• A rigorous and robust programme of systematic synthetic phonics is taught from EYFS. Grapheme-phoneme correspondence and synthetisation is taught early to ensure that children achieve success in their early reading.

Time is made in the week for handwriting, phonics/spelling, visits to the school library, individual reading and hearing a class reader. Children will also be given time to read a variety of books during the week during ERIC Time, and teachers and other adults will spend time hearing children read these books (see HGPA Reading Continuum for specific details broken down into year group expectations). Children are expected to apply the key skills of reading, writing and oracy across the whole curriculum.

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MATHS CURRICULUM

At Harrow Gate Primary Academy, we teach Maths using the Mastery approach. This involves most children moving through the programmes of study at broadly the same pace unless a personalised curriculum is needed. We believe that all children can achieve therefore all children are given the same starting point in lessons. Children who may be less confident with a concept are given support or interventions, and children who have grasped concepts rapidly will be challenged by depth of understanding, not acceleration. Through Maths Talk and mixed grouping, all children are immersed in the vocabulary rich environment necessary for effective problem solving and reasoning.

See: The essence of maths teaching for mastery



FLUENCY, PROBLEM SOLVING AND REASONING



Our Maths units are embedded with the three main aims of the curriculum: fluency, reasoning and problem solving. Once children have gained fluency in a subject area, they are given further time to reason with their understanding and develop this with problem solving situations. Maths concepts are introduced through many different structures and representations to allow depth of understanding for the children.

CONCRETE RESOURCES

Lessons involve using a mixture of concrete, pictorial and abstract approaches in order to make connections and expose the underlying structure of the mathematics.



To fully master a subject, we also believe children should be able to explain their thinking and reasoning and confidently teach others. Use of language is therefore a major feature of all Maths lessons as it develops children's reasoning and explanation.



RECALL OF PREVIOUS LEARNING

In addition, embedded in the Maths daily classroom routines, previous learning is revisited in DNA activity designed to recall previous learning from last lesson / last week / last unit / last year. This is used to keep learning fresh and gives the opportunity for interleaving to cover some less frequently taught units. In year 5 and Year 6, daily Mini-Maths promotes our strength in Mathematical arithmetic and fluency.



PROGRESSION AND VOCABULARY

Mathematical opportunities are realised and facilitated and is given purpose and audience at every given opportunity. Mathematical Vocabulary and Stem sentences are planned for and every class has high expectations for children to understand and use these. These stem sentences enable every child to have the tool kit to access high level, challenging problem solving and reasoning tasks. Consistency in language and understanding of mathematical vocabulary enables the children to access learning across the curriculum. Teachers are expected to follow the school's calculation policy to ensure progression throughout the year groups for teaching different strategies. Through utilising a small steps approach, the cognitive load is at an appropriate level.

CURRICULUM COVERAGE

An example of the units covered provided by White Rose Maths. Small steps are taken to ensure that children progress from Reception to Year 6 and are prepared for their future steps going forward with sound foundations.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)		Number: Addition and Subtraction (within 10)		Geometry: Shape	Numbe Va (withi	r: Place lue n 20)	Consolidation				
Spring	Number: Addition and Subtraction (within 20)			Numb ((Multipl	Number: Place Value (within 50) (Multiples of 2, 5 and 10 included)		rement: h and ght	Measur Weigł Volu	rement: nt and ume	Consolidation		
Summer	Number: Multiplication and Division (Reinforce Num multiples of 2, 5 and 10 Fract to be included)		nber: tions	Geometry: Position and Direction	Numbe Va (withir	r: Place lue n 100)	Measurement: Money	Measur Tir	rement: ne	Consolidation		

Year 1

Although we 'block' our curriculum, links are made with the whole of mathematics. For example during a unit on measure, children would apply of their calculation skills previously learned in the year. Additionally, teachers need to be aware of what children have learned prior to that year group. So, although the Y5 teacher may not have taught the 'statistics' unit by Christmas, the children will have learned about statistics in Y4 and so should be expected to apply those skills where relevant. To this end, we use interleaving when giving problem-solving tasks. This means that about 75% of the content would be related to the block being studied, but the other 25% would revise previously learned materials. 'Same Surface Different Depth' (SSDD) problems can also be used, where one stimulus related to the block being studied is used but different areas of mathematics are explored; see Barton, 2017.

STEM

What is STEM:

STEM stands for science, technology, engineering, and mathematics. STEM is important because it pervades every part of our lives. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Engineering is the basic designs of roads and bridges, but also tackles the challenges of changing global weather and environmentally-friendly changes to our home. Mathematics is in every occupation, every activity we do in our lives. By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it and hopefully pursue a job in a STEM field. A curriculum that is STEM-based has real-life situations to help the student learn.

Science INTENT:

A high-quality Science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Design and Technology INTENT:

Design and Technology prepares children to take part in the development of today's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and informed consumers and potential innovators. We live in a technological age, surrounded by artefacts and systems which have been produced, designed and made for us by other humans working together in a complex range of activities.

Through the use of an integrated STEM curriculum the children are innovative problem solvers using their acquired procedural and declarative knowledge across many subjects.

Animals including Humans Autumn 1 & 2 (Offspring, needs for survival) Understand basic needs for survival To use understanding of healthy food and cutting skills to design and make a healthy snack.

Food and Nutrition DT Prior Learning: EYFS Healthy eating and food names. Content: Food hygiene Food processes and equipment Cutting terminology / skills

Plants Summer 1

Learning Intention: To identify the basic parts of a flowering plant and a tree To understand the basic functions of the flower. stem, leaves and roots To understand the basic functions of a tree.

Parts and functions of a plant.

What does a plant need to grow? Summer 1 Plants The structure of a plant; Flower Stem Leaves Roots We use plants as food Vegetable Fruit. Common plants in our area Simple plant lifecycle

What does a plant need to grow? Summer 2 Basic needs - water, sun, soil, seeds Stem Leaves Roots Insects found in your garden





Summer 1 Chick life cycle

Farm animals and their young

Simple insect life cycle

Biology at Harrow Gate Primary Academy 6 Living Things and Their Habitats Spring 1 Describe how living things can be classified into broad groups according to common observable characteristics Understand the characteristics particular of plants, animals and micro-6 organisms Animals Including Humans Autumn 1 Justify reasons for classifying living things. Identify and name the main parts of the human circulatory Famous Scientist: Carl Linnaeus system 6 Describe how water and nutrients are transported through the body Evolution and Inheritance Autumn 2 Explain the impact of diet, exercise, drugs and lifestyle on the Understand that living things have changed over time (evolved). way the body functions. Recognise that living things produce offspring which are similar but not DT – Food and Nutrition identical Identify how plants and animals are adapted to their environment. Famous scientist: Charles Darwin Mary Anning Alfred Wallace Living Things and their Habitats Spring 1 To know the differences in the life cycles of a mammals, Animals including humans Summer 1 amphibian, insect and a bird Understand and describe the changes in humans Describe the life process of reproduction in plants and as they age. animals 4 Animals Including Humans Summer 2 To know the basic parts and functions of the digestive system in humans. Δ To identify the different types of teeth and functions in humans. Living things and their habitats Spring 2 To be able to construct food chains Understand that vertebrates can be grouped due to their characteristics. Animals including humans (Nutrition) Summer Use this understanding to use and create classification keys 3 To know that environments are changing and how this affects term the wildlife. To understand that animals and humans need the Basic classification, environment right types and amounts of nutrition. To be able to identify human and animal skeletal David Attenborough systems and muscular systems To know these provide support, protection and movement. PLANTS Spring 1 To understand the functions of a flowering plant DT – Food and Nutrition (plant, tree) To use their knowledge of nutrition and seasonality to Understand how water is transported through a create a nutritious savoury meal. plant (transpiration)

Understand how the processes of pollination,

cactus, volcanic plants etc.)

plants.

seed formation and seed dispersal in flowering

Understand the needs of particular plants (e.g. a

Famous Scientist - Louis Pasteur

To use their knowledge of pasteurisation and how foods are processed and manufactured to ensure they are safe for human consumption

Light Autumn 1

To understand what light is and its importance. To identify sources of light (man-made and natural).

To know how light moves and how it can be reflected.

To understand how the eye detects light. Use their knowledge of light to create suitable eye wear.

Forces and Magnets Summer 2

Understand how things move on different surfaces and the forces acting on them. Understand the properties of magnets Use the knowledge of magnets and materials to identify magnetic materials.

DT Pneumatics

To use their knowledge of forces and pneumatics to create a moving figure. History of Pneumatics German physicist Otto James Watt Uses of Pneumatics DT vocabulary Tools required for a simple pneumatic





Electricity Autumn term

To understand that electricity is an energy and identify everyday appliances that use it To be able to construct simple circuits and know the electrical components but not their symbols To use their knowledge of circuits and electricity to create a circuit with a switch and a light which serves a purpose

Famous Scientist - Alessandro Volta Physicist

Discovered the battery!

DT - Electrical systems – simple circuits and switches

Pose the children a variety of design criteria which enables them to use and apply their understanding of circuits to design and make a Christmas decoration.

Sound Summer 1

To understand how sounds are made

Know that vibrations from sounds travel through a medium to our ear.

To understand pitch and volume how this affects sound

To understand how the volume of a sound is affected by distance.

Famous Scientist: Marin Mersenne Robert Boyle

Earth and Space Autumn 2

Understand the movement of the Earth in relation to the sun and the other planets. Explain the movement of the Moon relative to the Earth

Know why the Earth's rotation causes night and day

Explain that the Sun, Moon and Earth are spherical bodies

To recognise the theories of black holes and relativity

Famous Scientist - Stephen Hawking Brian Cox - Guion 'Guy' Bluford (first African American in Space)

Forces Summer term

Know why unsupported objects fall towards earth because of the force of Gravity Identify the effects of air resistance, water resistance and friction

Recognise that some mechanisms can allow a smaller force to have a greater effect.

DT - Mechanical systems – Pulleys and gears

Pose the children a variety of design criteria which enables them to use and apply their understanding of forces and mechanical systems to design and make a moving object.

6 simple machines identified by science and DT

Pulley rotations Gear ratios Reversing switches Annotated diagram Exploded diagram



Light Spring 2

To know how light travels To explain how light allows us to see To explain how shadows are formed

Famous Scientist: Thomas Edison

STEM Critical Thinking

Electricity Summer 2

To understand how the voltage of cells affects the brightness of a lamp and the volume of a buzzer.

To be able to compare and give reasons for how different electrical components function Use recognised symbols to represent electrical circuits in a diagram

Year 5



Physics Harrow Gate Primary Academy

Chemistry at Harrow Gate Primary Academy





STEM LONG TERM PLAN



Year group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Chemistry What is a scientist? Learning Intention: • Know that a Scientist can • Understand the scientific • Be able to Select approprienquiry Mini experiments weekly that in <u>'working scientifically</u> ' skills	be anyone lines of enquiry iate scientific line of troduce the <u>3 main</u>	Spring 1 Spring 2 Chemistry Everyday materials Everyday materials Learning Intention: • Understand properties of materials • Understand the mechanism of an axle and wheel • Be able to combine knowledge properties of materials to suit a specific design criteria Mechanisms / Axels and wheels Wacky Races Learning Intention: Pose the children a variety of design criteria which enables them to use and apply their understanding of properties of materials and mechanisms. Content: DT specific processes • Wheel • Axle • Balance		 Biology Plants Learning Intention: To identify the basic parts of a flowering plant and a tree To understand the basic functions of the flower, stem, leaves and roots To understand the basic functions of a tree. Parts and functions of a plant. 	 Biology Animals including humans Learning Intention: To name common animals. To know how animals are grouped (5 categories). To understand how you can identify animals. To name and label the parts of the human body. Be able to place animals into groups dependent on their characteristics.
Year 2	 Biology Learning intention: Understand basic needs fo To use understanding of he cutting skills to design and snack. Animals including Humans (Offspring, needs for survival) Food and Nutrition Prior Learning: EYFS Healthy names. Content: Food hygiene Food processes and equipmen Cutting terminology / skills 	r survival ealthy food and make a healthy eating and food	 Biology Learning Intention: Understand the difference between a seed and a bulb Understand what a plant needs to germinate Understand how certain conditions can affect germination. Plants 	 Chemistry Uses of every day materials Learning Intention: Understand why materials are selected for certain uses Test materials to identify their suitability Use this knowledge to create products which are absorbent or waterproof 	 Biology Learning Intention: Use their understanding of living things and their habitats to apply to a real life context Why do we need to know more about certain animals (endangered animals, human impact)? How can we use our knowledge to observe animals in their natural habitats Living things and their habitats (Habitats, dead or alive Food chains) LINKS: Geog Spring 1 Famous Scientist 	

Veer 2	Dhusias	Chomistry	(seed and bulb, what plants need to grow)	Puppy challenge Charles Mackintosh LINKS: Art sculpture Spring 2 & Biology	Jane Goodall Biolo natural habitat. Effe group	ogist Study of gorillas in ects of humans on this family
rear 3	 Physics Light Learning intention: To understand what light is and its importance. To identify sources of light (man-made and natural). To know how light moves and how it can be reflected. To understand how the eye detects light. Use their knowledge of light to create suitable eye wear. 	 Cnemistry Rocks and Soils Learning Intentions: To identify the physical properties of rocks To use this knowledge to group and compare. To understand how fossils are formed. To know how soil is created and the properties of different types. (How they are formed) LINKS: Geography Spring 1 Mary Anning John McAdam 	 Biology Plants Learning Intentions: To understand the functions of a flowering plant (plant, tree) Understand how water is transported through a plant (transpiration) Understand how the processes of pollination, seed formation and seed dispersal in flowering plants. Understand the needs of particular plants (e.g. a cactus, volcanic plants etc.) 	 Biology Animals including his Learning Intentions: To understand that humans need the amounts of nutrition To be able to idem animal skeletal symuscular systems To know these proprotection and modified the model of the protection and modified the protection and processed and modified the protection and modified	Aumans (Nutrition) at animals and right types and on. http://www.and stems and bovide support, ovement. tion dedge of nutrition o create a nutritious	 Prysics Forces and Magnets Learning Intentions: Understand how things move on different surfaces and the forces acting on them. Understand the properties of magnets Use the knowledge of magnets and materials to identify magnetic materials. Pneumatics Learning Intentions: To use their knowledge of forces and pneumatics to create a moving figure. Content: History of Pneumatics German physicist Otto James Watt Uses of Pneumatics DT vocabulary Tools required for a simple pneumatic

Year 4	 Physics Electricity Learning Intention: To understand that electricities identify everyday appliances To be able to construct simplication in the electrical components symbols To use their knowledge of content electricity to create a circuit of electricity to create a circuity to electricity to create a circuit of electr	y is an energy and a that use it ble circuits and ents but not their ircuits and with a switch and a a rcuits and esign criteria which heir understanding Christmas	 Chemistry States of matter Learning Intention: To know there are three states of matter. Use this knowledge to group materials according to their properties. To know that water exists naturally in all 3 states. To know how the different states play a part in the Water Cycle 	 Biology Living things and their habitats Learning Intention: Understand that vertebrates can be grouped due to their characteristics. Use this understanding to use and create classification keys To know that environments are changing and how this affects the wildlife. (Basic classification, environment) David 	 Physics Sound Learning Intentions: To understand how sounds are made Know that vibrations from sounds travel through a medium to our ear. To understand pitch and volume how this affects sound To understand how the volume of a sound is affected by distance.	 Biology Animals Including Humans Learning Intentions: To know the basic parts and functions of the digestive system in humans. To indentify the different types of teeth and functions in humans. To be able to construct food chains LINK: Yr5 Hist Autumn 1
Year 5	 Chemistry Properties and Changes of Materials Learning Intention: To be able to group everyday materials on the basis of their properties To know that some materials dissolve in liquids to form a solution. 	 Physics Earth and Space Learning Intentions: Understand the movement of the Earth in relation to the sun and the other planets. 	Biology Living Things and their Habitats Learning Intentions: • To know the differences in the life cycles of a mammals, amphibian ,	Biology Animals including humans Learning Intentions: • Understand and describe the changes in humans as they age.	 Physics Forces Learning Intention Know why unsue earth because Identify the efference is stance and Recognise that a smaller force 	ns: upported objects fall towards of the force of Gravity ects of air resistance, water friction some mechanisms can allow to have a greater effect. ms – Pulleys and gears

	 To identify the correct process for separating mixtures Understand everyday uses of particular materials Understand that some changes are reversible and some irreversible. John Dunlop 	 Explain the movement of the Moon relative to the Earth Know why the Earth's rotation causes night and day Explain that the Sun, Moon and Earth are spherical 	 insect and a bird Describe the life process of reproduction in plants and animals 	te p	Learning Intention Pose the children a which enables then understanding of fo to design and make Content: 6 simple and DT Pulley rotations Gear ratios Reversing switches Annotated diagram Exploded diagram	ns: a variety of design criteria n to use and apply their prces and mechanical systems e a moving object. machines identified by science
		bodies To recognise the theories of black holes and relativity Famous Scientist Stephen Hawking Brian Cox Guion 'Guy' Bluford (first African American in Space)			mar	
Year 6	 Biology Animals Including Humans Learning Intentions: Identify and name the main parts of the human circulatory system Describe how water and nutrients are transported through the body. Explain the impact of diet, exercise, drugs and lifestyle on the way the body functions. DT – Food and Nutrition 	 Biology Evolution and Inheritance Learning Intentions: Understand that living things have changed over time (evolved). Recognise that living things produce offspring which are similar but not identical Identify how plants and animals are 	 Biology Living Things and Their Habitats Learning Intentions: Describe how living things can be classified into broad groups according to common observable characteristics Understand the characteristics particular of plants, animals 	 Physics Light Learning Intentions: To know how light travels To explain how light allows us to see To explain how shadows are formed Thomas Edison STEM Critical Thinking 	STEM Critical Thinking Tomato Challenge Learning Intention: Provide the children with a real life challenge for them to demonstrate and consolidate their STEM skills.	 Physics Electricity Learning Outcomes: To understand how the voltage of cells affects the brightness of a lamp and the volume of a buzzer. To be able to compare and give reasons for how different electrical components function Use recognised symbols to represent electrical circuits in a diagram.

adap	oted to and micro-		
their	organisms		
envii	ronment. • Justify reasons		
	for classifying		
Charles	Darwin living things.		
Mary An	nning		
Alfred W	Vallace Carl Linnaeus		
	LINKS: History		
	Trench		



BIOLOGY PROGRESS GRID

Y1Working Scientifically• 3 methods of scientific enquiry: 1. Carrying out comparative tests 2. Observing changes over time 3. Grouping and classifying• Carry out comparative tests with 2 • Orally answer a question with scie vocabulary• Asking simple questions and recognising that they can be answered in different ways • Observing closely, using simple equipment • Performing simple tests • Identifying and classifying • Using their observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions.• 3 methods of scientific enquiry: 1. Carrying out comparative tests 2. Observing changes over time 3. Grouping and classifying • Name variety of common UK wild / garden plants• Carry out comparative tests with 2 • Orally answer a question with scie vocabulary • Sort using 2 given criteria / groups • Notice things that are the same. • Use scientific equipment: simple the measuring jugs, scales.	variables ntific ermometer,
 Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions. 	ntific ermometer,
 in different ways Observing closely, using simple equipment Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions. 2. Observing changes over time 3. Grouping and classifying Name variety of common UK wild / garden plants Name variety of common UK wild / garden plants 	ermometer,
 Observing closely, using simple equipment Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions. Gathering and recording data to help in answering questions. Grouping and classifying Know what a question is Name variety of common UK wild / garden plants Sort using 2 given criteria / groups Notice things that are the same. Use scientific equipment: simple the measuring jugs, scales. 	ermometer,
 Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions. Prants Know what a question is Name variety of common UK wild / garden plants Name variety of common UK wild / garden plants 	ermometer,
 Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions. Name variety of common UK wild / garden plants 	ermometer,
 Osing their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions. Indine valiety of common OK wild / garden 	
• Gathering and recording data to help in answering duestions.	
Deciduous trees LIK	
Plants Evergreen trees LIK	
Identify and name a variety of common wild and garden plants Structure of a plant	
including deciduous and evergreen trees	
Identify and describe the basic structure of a variety of common Functions of a plant	
flowering plants, including trees.	
Animals including humans Animals and Humans	
Identify and name a variety of common animals including fish, Definition of fish, amphibian, reptile, mammal,	
amphibians, reptiles, birds and mammals bird	
Identify and name a variety of common animals that are carnivores, Name animals from each category	
Describe and compare the structure of a variety of common animals Herbivore (fish, amphibians, roptiles, birds, and mammals, including pate) Operities	
(IISH, amphibians, replies, birds and manimals, including pets)	
and say which part of the body is associated with each sense	
and say which part of the body is abounded with oder bonder.	
V2 Working Scientifically Method of scientific enguiry: Noticing patterns • Ask a simple question	
Asking simple questions and recognising that they can be answered Write a simple questions and recognising that they can be answered	oeriment
in different ways Living things and habitats using scientific vocabulary	
Observing closely, using simple equipment Definition of living, non-living and never been Sort using more than 2 groups with	ı own
Performing simple tests alive criteria	
Identifying and classifying Identifying and classifying Identifying and classifying Identifying and classifying	ce
Using their observations and ideas to suggest answers to questions Local habitats Notice things that are different	
Gathering and recording data to help in answering questions Woodland, seashore, ocean, rainforest, desert Use scientific equipment: pooters,	
Basic needs of living things- greenhouses (growing bags), stop	watches,
Living things and habitats Pipette, magnifying glass	
Explore and compare the differences between things that are living, Definition food chain	
 Identify that most living things live in habitats to which they are Identify that most living things live in habitats to which they are 	
suited and describe how different babitats provide for the basic	
needs of different kinds of animals and plants, and how they depend	
on each other	
Identify and name a variety of plants and animals in their habitats, Growth of seed / bulb	
Including micro-habitats Needs of a plant – water, light, food, temp	

	National Curriculum POS	Declarative Knowledge	Procedural Knowledge
	 Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. Plants Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. Animals and Humans Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. 	 Animals and Humans Definition of offspring Growth Human needs beyond basic survival Health / hygiene (food) 	
Y3	 Working Scientifically: Practical scientific methods, processes and skills through the teaching of the programme of study content: Asking relevant questions and using different types of scientific enquiries to answer them Setting up simple practical enquiries, comparative and fair tests Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Identifying differences, similarities or changes related to simple scientific ideas and processes Using straightforward scientific evidence to answer questions or to support their findings. Plants Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Investigate the way in which water is transported within plants 	 Method of scientific enquiry: Fair Test Scientific Keys Plants Functions of the parts of a plant Conditions for growth Know how water is transported in a plant Life cycle of a plant Animals including humans 5 food groups Quantities of food for healthy diet Human skeleton 6 major muscle groups 	 Ask informed questions using expressive scientific vocabulary Carry out a simple, guided, fair test To use a simple key To use a secondary source as guided by the teacher Use systematic observation to track the movement of water through a plant Write a guided conclusion using PEEL (point evidence explanation link) To use a scientific diagram in support of conclusion Use scientific equipment: scalpel, heart rate monitor

 Explore the part that flowers play in the life cycle of hovering plants, including polination, seed formation and seed dispersal. Animals including humans, need the right types and amount of huttiting, and that they cannot make their own food; they get nutrition from what they can all that they cannot make their own food; they get nutrition from what they can all that they cannot make their own food; they get nutrition from what they can all that they cannot make their own food; they get nutrition from what they can all more shall be composed and movement. Working Scientifically: Working Scientifically: Asking relevant questions and using different types of scientific requires to answer duestions and, where any and fail tests: Making yothemat: and called loggers. Setting up simple practical enquires, comparative and fail tests: Setting up simple practical enquires, comparative and fail tests: Setting up simple practical enquires, comparative and fail tests: Sin Bavid Attenborough 1926 - Animals and all togges: Calabering, recording, classifying and presenting data in a variety of ways to help in answering questions of results and contains: Recording findings using simple scientific language, drawings, liabiled diagrams, keys, bar chards, and labiles Recording the indings can be grouped in a variety of ways: Explore and use classification keys to help group, jentify and findings. Using things and their habitats: Maring simple function and more any and the bias indexify of ways: Recording findings that is concharge and that this can sometime spoet and parks in themas on changes and that the cancing of the program and and witten explores that living things that be classification to result and diagrams, keys to help group, jentify and findings. Using results to draw simple conclusions		National Curriculum POS	Declarative Knowledge	Procedural Knowledge
 Y4 Working Scientific Tably: Practical scientific methods, processes and skills through the teaching of the programme of study content: Asking relevant questions and using different types of scientific enquines to answer them. Setting up simple practical enquines, comparative and fair tests Making accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Recording findings using simple scientific language, drawings, labeled diagrams, keys, bar charts, and tables Reporting on findings tom enquines, including grad and written explanations, displays or presentations of results and conclusions, make predictions from equiptions, including cord and written explanations, displays or presentations or changes related to simple scientific leas and processes Using straightforward scientific evidence to answer questions or to support their findings. Living things an their local and wider environment, aname and tunction their simple scientific data and wider environment, aname and function to support their findings. Using straightforward scientific evidence to answer questions or to support their findings. Using straightforward scientific leavidence to answer questions or to support their findings. Living things and their Kabitas Recorgine the utivity of the dasic parts of the digestive system Descience the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions. Explore and use classification they is to help group, identify and reserve there th		 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. Animals including humans Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat Identify that humans and some other animals have skeletons and muscles for support, protection and movement. 	Gate	
Construct and interpret a variety of food chains, identifying	¥4	 Working Scientifically: Practical scientific methods, processes and skills through the teaching of the programme of study content: Asking relevant questions and using different types of scientific enquiries to answer them Setting up simple practical enquiries, comparative and fair tests Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Identifying differences, similarities or changes related to simple scientific ideas and processes Using straightforward scientific evidence to answer questions or to support their findings. Living things and their Habitats Recognise that living things can be grouped in a variety of ways Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment Recognise that environments can change and that this can sometimes pose dangers to living things. Animals, including humans Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying 	Living things Vertebrates Invertebrates Human impact on environments Deforestation Nature reserve Ecological land parks Sir David Attenborough 1926 – Animals and humans Digestive system Human teeth – name and function Animal teeth – name and function Identify producer, predator and pray 	 Ask a range of questions based on scientific knowledge and suggest where answers could be found. Design a simple fair test Interpret a food chain Design a simple classification key Identify and use a secondary source Write a clear and cohesive guided conclusion using PEEL which incorporates any data / findings. To create a guided scientific diagram in support of conclusion.

	National Curriculum POS	Declarative Knowledge	Procedural Knowledge
Y5	 National Curriculum POS 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 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. Living Things 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. Animals, including humans Describe the changes as humans develop to old age. 	Declarative Knowledge Living Things • Definition of life cycle • Life cycle of : Bird, amphibian, mammal, insect, reptile, fish • Reproduction in plants: Sexual and asexual • Reproduction in humans Animals and humans • Development stages of a human: infancy, childhood, adolescence, adulthood	 Procedural Knowledge Identify an opportunity to work scientifically drawing on their prior knowledge and learning. Create a line of enquiry for the science opportunity presented, incorporating a wide range of question types and scientific vocabulary. Design and make a key for a given purpose Identify opinion and fact when using a secondary source Look for causal relationships in data Write a conclusion which draws on all scientific vocabulary and understanding using relevant diagrams.
Y6	 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 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. 	Living things and their habitats Classification Characteristics Micro-organisms – Alexander Fleming / Edward Jenner Carl Linnaeus 1707 – 1778 	 Independently work scientifically creating own lines of enquiry Explain why variables must be controlled Design and make a key Identify evidence that refutes or supports their ideas Justify science thought using all previous methods for recording, explaining the degree of trust in results Use their results to make predictions and identify further observations, comparative and fair tests might be needed.

National Curriculum POS	Declarative Knowledge	Procedural Knowledge
 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. Animals including humans Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans. Evolution and Inheritance 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. 	 Animals including humans Human Circulatory system Function of heart, blood vessel and blood Impact of diet, exercise, drugs and lifestyle on bodies function. Nutrients Transportation of nutrients and water in animals and humans Evolution and Inheritance Definition of evolution linked to living things Charles Darwin 1809 - 1882 Information from Fossils Mary Anning 1799 - 1847 Adaptation Alfred Wallace 1823 - 1913 	

Academy

PHYSICS PROGRESS GRID

	NC POS	Declarative Knowledge	Procedural Knowledge
Y1	Seasonal Changes	3 methods of scientific enquiry:	Carry out comparative tests with 2 variables
	112	4. Carrying out comparative tests	Orally answer a question with scientific vocabulary
	1K 11	5. Observing changes over time	Sort using 2 given criteria / groups
	11	6. Grouping and classifying	Notice things that are the same.
		Know what a question is	 Scientific equipment: Measuring jug, thermometer
		Nome cooperation	
		Name seasons Eastures of a page on	
		Features of a season Time of year (datas	
		Inne of year / dates	
		Length of day	
Vo			
		Method of acientific and ving Eair Teat	Act informations wing any action and the second start
¥3		Scientific Kove	Ask informed questions using expressive scientific vocabulary
	Light		Carry out a simple, guided, fair test
	3i	Definition of light	• To use a simple key
	3k	Definition of dark	I o use a secondary source as guided by the teacher
	31	Light source	• Use systematic observation to track the movement of water
	3m	Beflection	Write a guided conclusion using PEEL (point evidence
	3n	Safety of light with the sun a source	explanation link)
		Definition of shadow	 To use a scientific diagram in support of conclusion
			Scientific equipment: Magnets, light box, Newton meters
	Forces and magnets	S WUP	
	30	Forc <mark>es a</mark> nd magnets	
	3p 3m	Definition of force	
	3 4 27	Definition of friction	
	3 2	Magnetic force	
	31	Attract	
	51	Repel	
		Magnetic materials	
Y4	Sound	Sound	 Ask a range of questions based on scientific knowledge and
	4j	Sound definition	suggest where answers could be found.
	4K	How sound is made	Design a simple fair test
	41 4m	Sound travel through Medium	Interpret a food chain
	4m	• Robert Boyle 1627 – 1691 (medium)	Design a simple key
		Pythagoras – vibration and sound waves	Identify and use a secondary source
		Speed of sound – Marin Mersenne	 Write a clear and conesive guided conclusion using PEEL which incorporates any data / findings
	Electricity	Electricity	To create a guided scientific diagram in support of conclusion
	40	Electrons and protons	Scientific equipment: Tuning forks, data loggers, decibel
	4p	A complete circuit	readers batteries, switches, buzzers, clips, wires, bulbs, amps
	4q	Electrical components	
	41	Conductors and insulators	

		Electricity safety				
Y5	Earth and Space 5j 5k 5l 5m	Earth and Space • Gravity • Sir Isaac Newton 1643 - 1727 • Movement of the Earth • Name planets in our Solar system • Sun = star • Movement of the moon • Spherical bodies – flat earth theory • Night and day • Heliocentric • Geocentric Brian Cox – 1968 –	 Identify an opportunity to work scientifically drawing on their prior knowledge and learning. Create a line of enquiry for the science opportunity presented, incorporating a wide range of question types and scientific vocabulary. Design and make a key for a given purpose Identify opinion and fact when using a secondary source Look for causal relationships in data Write a conclusion which draws on all scientific vocabulary and understanding using relevant diagrams. Scientific equipment: Levers, pulleys, gears 			
	Forces 5n 5o 5p	Forces Air Resistance Water resistance Load, pivot point, fulcrum Archimedes 212BC 	2) M3 3			
Υ6	Light 6 6j 6k 6l Electricity 6m 6n 6n	 Light Journey of light Light sources Thomas Edison 1877 – 1930 Electricity Adding more volts (power) Renewable power Nikola Tesla – alternating current electricity supply system Eton Musk – electric car 	 Independently work scientifically creating own lines of enquiry Explain why variables must be controlled Design and make a key Identify evidence that refutes or supports their ideas Justify science thought using all previous methods for recording, explaining the degree of trust in results Use their results to make predictions and identify further observations, comparative and fair tests might be needed. 			
	Academy					

CHEMISTRY PROGRESS GRID

	NC POS	Declarative Knowledge	Procedural Knowledge			
Y1	Working Scientifically	What is a scientist?	Carry out comparative tests with 2 variables			
		3 methods of scientific enquiry:	Orally answer a question with scientific vocabulary			
		7. Carrying out comparative tests	Sort using 2 given criteria / groups			
		9 Grouping and classifying	Notice things that are the same.			
		Know what a question is				
	Everyday materials	Everyday materials				
	1g	Object definition				
	1h	Material definition				
	11	Identification of materials				
	1)	Physical properties				
Va		Method of scientific enquiry: 4 Noticing patterns	Ack a simple question			
12	Use of everyday	Uses everyday materials	Write a simple conclusion to an experiment using scientific			
	materials	• Suitability	vocabulary			
	2j	Solid	Sort using more than 2 groups with own criteria			
	2k	Changing shape	Find information from a given source			
	21	Manipulated	Notice things that are different			
		Charles Macintosh 1766 – 1843				
		waterproof	E			
Y3		Method of scientific enquiry: 5.Fair Test	Ask informed questions using expressive scientific vocabulary			
	Deelve	Scientific Keys	Carry out a simple, guided, fair test			
	ROCKS	Rocks and soils	To use a simple key			
	3h	Sedimentary	I o use a secondary source as guided by the teacher			
	3i		Use systematic observation to track the movement of water through a plant			
	-	Properties of rocks	Write a guided conclusion using PEEL (point evidence			
		Formation of fossils	explanation link)			
		Soil	To use a scientific diagram in support of conclusion			
		John McAdam 1756 – 1836 road construction				
		Dr Jessica Holmes (Geologist) Present day!				
Y4	States of matter	States of matter	Ask a range of questions based on scientific knowledge and			
	49 4b		Suggest where answers could be found.			
	4i		Design a simple fail test Interpret a food chain			
		Change of states	Design a simple key			
		Water cycle	Identify and use a secondary source			
		Joseph Priestlev (CBBC)	Write a clear and cohesive guided conclusion using PEFI			
			which incorporates any data / findings.			
			To create a guided scientific diagram in support of conclusion.			
Y5	Properties and	Properties and changes in materials	Identify an opportunity to work scientifically drawing on their			
_	changes in materials	Properties of materials	prior knowledge and learning.			

	5d 5e 5f 5g 5h 5i	 Transparency Solubility conductivity Reversible Irreversible John Dunlop 1840 - 1921 	•	Create a line of enquiry for the science opportunity presented, incorporating a wide range of question types and scientific vocabulary. Design and make a key for a given purpose Identify opinion and fact when using a secondary source Look for causal relationships in data Write a conclusion which draws on all scientific vocabulary and understanding using relevant diagrams.
Y6				



Harrow Gate Primary Academy Design and Technology Big Ideas





Trademy

Design and Technology at Harrow Gate Primary Academy



DESIGN AND TECHNOLOGY PROGRESS GRID

	Declarative Knowledge	Procedural Knowledge (National Curriculum)				
		Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition
Year 1 Mechanisms – Axels and wheels Prior link to science - Materials	 DT specific processes Wheel Axle Balance History linked to wheels and axles Examples of wheels and axles in all forms (Not just vehicles) 	 Understanding contexts, users and purpose Work confidently within the context of imaginary story State the product they are making Describe what product is for Say how their product will work Say how product is suitable for intended user Generating, developing, modelling and communication ideas Generate ideas drawing on experiences Use knowledge of existing products Develop and communicate ideas by talking and drawing Model ideas by exploring materials, components and construction kits Use templates and mockups 	 Planning Plan by suggesting what to do Select from a range of equipment – explaining choices Practical skills and techniques Follow safety procedures Use a range of materials / components including construction materials Investigate how freestanding structures can be made stronger, stiffer and more stable 	 Own ideas / product Talk about their design Make a simple judgment against a given design criteria Suggest how they can improve it Existing products: Explore what products are and their use Explore materials the product is made from 	 The movement of simple mechanism s: Wheels Axels Use the correct technical vocabulary for their project. 	

Academy
	Declarative Knowledge	Procedural Knowledge (National Curriculum)				
		Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition
Year 2 Food and nutrition	 Food hygiene Food processes and equipment Cutting terminology Knowledge of healthy plate from science 	 Consolidation of Yr1 plus Understanding contexts, users and purpose Work confidently in the context of serving their community. Say whether the product is for themselves or others Generating, developing, modelling and communication ideas Ideas drawn from own experiences 	 Consolidation of Yr1 plus Planning Select from a range of cutting tools Select from a range of components according to their characteristics Practical skills and techniques Follow safety and hygiene procedures Cut products 	Consolidation of Yr1 plus Own ideas / product Talk about their design Make a simple judgment against a given design criteria Suggest how they can improve it Existing products: Explore what they like and dislike about products.	Food is combined according to sensory characteristi cs	 Sort and classify food groups How to prepare food hygienically without a heat source Techniques of: Cutting Peelin Grating Correct knife / tool hold: Grip Pointer Rock Push Claw & Draw Slow and Sharp https://www.eatyourbeet s.com/kitchen-tips/7- tips-for-teaching-your- kids-how-to-use-a-knife/
Pneumatics	 Pneumatics History of Pneumatics German physicist Otto James Watt Uses of Pneumatics DT vocabulary Tools required for a simple pneumatic 	 Understanding contexts, users and purpose Describe the purpose of products Indicate the design features that will appeal to intended users Explain how parts work Generating, developing, modelling and communication ideas Share and clarify ideas through discussion 	 Planning Select tools and equipment suitable for task Explain choice of tools and equipment in relation to skills and techniques they will be using Select materials and components suitable for task Practical skills and techniques Follow safety procedures Use mechanical components with some accuracy Assemble, join and combine materials and components with some accuracy. Apply a range of finishing techniques including those from ART with some accuracy 	 Own ideas / product Identify the strengths and areas for development in ideas and products Refer to their design criteria as they design and make Use their design criteria to evaluate their completed products Existing products: Investigate and analyse: How well products have been designed and made Why materials have been chosen Methods of construction 	 That materials can be combined and mixed to create more useful characteristi cs Use correct technical vocabulary for projects they are undertaking How pneumatic systems create movement. 	 History Summer 2 understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

	Declarative Knowledge					
		Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition
Year 4 Electrical systems – simple circuits and switches LINKS – Science Autumn 1	 Design criteria All declarative knowledge from yr4 Physics Electricity and Alessandro Volta Toggle switch Reed switch Secure connections Hand made switches Commercial switches Circuit symbols 	 Consolidation of Yr3 plus Understanding contexts, users and purpose Gather information about needs and wants of particular individuals and groups Develop own design criteria and use these to inform ideas. Generating, developing, modelling and communication ideas Model ideas using prototypes. Use annotated sketches / exploded diagrams to develop and communicate ideas Generate realistic ideas focussing on the needs of the user Make design decisions that take account of the availability of resources 	Consolidation of Yr3 plus Planning • Explain their choice of materials and components according to functional properties. Practical skills and techniques Consolidation of all aspects	Consolidation of Yr3 plus Own ideas / product • Consider views of others including intended users to improve their work Existing products: Investigate and analyse: Consolidation of all aspects	Consolidation of Yr3 plus Use learning from Science and maths to help design and make products that work. That materials have both functional properties and aesthetic qualities How simple electrical circuits and component s can be used to create functional products.	
Year 5 Mechanical systems – Pulleys and gears	 6 simple machines identified by science and DT Pulley rotations Gear ratios Reversing switches Annotated diagram Exploded diagram 	 Understanding contexts, users and purpose Describe the purpose of product Explain how particular parts work Develop a design specification to guide thinking Generating, developing, modelling and communication ideas Share and clarify ideas through discussion Model ideas using prototypes Use annotated sketches and exploded diagrams Make design decisions that take account availability of resources 	 Consolidation Yr4 Plus Planning Select tools and equipment suitable for the task Explain choices made Produce an appropriate list of tools, equipment and tools Formulate a step by step plan as a guide to making Practical skills and techniques Use techniques that follow of number of steps 	 Consolidation Yr4 Plus Own ideas / product Critically evaluate the quality of the design manufacture and fitness for purpose of their products as they design and make Evaluate their ideas and products against design specification 	 Consolidation of yr3 and 4 How	

	Declarative Knowledge		Procedural Knowledge (National Curriculum)				
		Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition	
Year 6 All DT knowledge		Consolidation of Yr5 plus Understanding contexts, users and purpose Carry out research and web based resources Generating, developing, modelling and communication ideas Share and clarify ideas through discussion Model ideas using prototypes Use annotated sketches and exploded diagrams Make design decisions that take account availability of resources	Consolidation of Yr4 / 5 plus Consolidation Yr4 Plus Practical skills and techniques • Demonstrate resourcefulness when tackling practical problems	Consolidation of Yr5 plus Existing products: Investigate and analyse: • Who designed and made the products • Where, when and why products are made • Whether products can be recycled or reused Evaluation key events and individuals: • Inventors designers engineers	Consolidation of all DT	understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	



FOUNDATION SUBJECTS

At Harrow Gate Primary academy we use half termly 'spotlight' subjects. This enables the content to be studied in depth and prior knowledge to be used and built upon. We want our children to know when they are studying History and using geography skills. At Harrow Gate we know that no subject stands in isolation and the children will use their procedural and declarative knowledge from all aspects of the curriculum to inform their next steps in learning. By utilising prior knowledge in the design of the curriculum, the children know and remember more.

When designing the curriculum we have considered the '7 Key Principals' as outlined by D.William (2013)

CURRICULUM DESIGN KEY PRINCIPLES

A curriculum breathes life into a school's or teacher's philosophy of education; it is purpose enacted. Different philosophies of education personal empowerment; cultural transmission; preparation for work or preparation for citizenship — place different emphasis on aspects of curriculum design. Curriculum design involves seven key principles which



operate in tension with each other.

VERTICALLY INTEGRATED

Focuses on progression by carefully sequencing knowledge; provides clarity about what getting better at the subject means.



SSAT (The Schools Network) Ltd

BALANCED

Promotes intellectual, moral, spiritual, aesthetic, creative, emotional and physical development as equally important.



APPROPRIATE

Looks to avoid making unreasonable demands by matching level of challenge to a pupil's current level of maturity/knowledge. Eligned by Policax Cliver Caviglial dicaxton

RIGOROUS

Seeks to develop intra-disciplinary

habits of mind; the subject matter

is taught in a way that is faithful to

its discipline.

@LEADINGLEARNER LTD



COHERENT

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Makes explicit connections and links between the different subjects/ experiences encountered.



FOCUSED

Seeks to keep the curriculum manageable by teaching the most important knowledge; identifies the big ideas or key concepts within a subject.



Seeks to connect the valued outcomes of a curriculum to the pupils being taught it; provides opportunities for pupils to make informed choices.

Harrow Gate Primary Academy Curriculum Plan

Vertical Links: within a subject over the years (Refer to progress map for each subject) Horizontal Links: between subjects in a year Diagonal Links: between year groups AND subjects

Through the links the curriculum is built around retrieval practice: 'Using your memory, shapes your memory' and in turn improves transfer of knowledge to new contexts.

	Autumn 1	Autumn 2	Spring 1	Spring 2	1 week	Summer 1	Summer 2
Spotlight	History	RE	Geography	Art	EASTER	Reflect and review	History
Year 1	Have children always lived like me? Prior Learning: All about Me – EYFS Content: Changes within living memory Aspects of change within national life. Home, education, recreation, clothes, food. Horizontal Links: Sum 2 History Diagonal Links:Yr2 Geography Science materials	How are Christmas and Diwali similar and different? Prior Learning: EYFS: The Nativity Story Content: Christianity: 1.What Christians believe about Christmas. 2.The Nativity and its importance to Christians. 3.Christian beliefs and how they celebrate Christmas. Christian symbols and places of worship. 4.What is expected of a Christian child. Secular traditions at Christmas Hindu: 1.What Hindus believe about Diwali. 2.The Story of Rama and Sita and its importance to Hindus. 3.Hindu beliefs and how they celebrate Diwali. Hindu symbols and places of worship. 4.What is expected of a Hindu child. Horizontal Links: Geography – countries on the map India summer 1 ART – Colours and patterns Diagonal Links: History: Yr4	What is the weather like around the world? Prior Learning: Weather songs, daily forecast, Comparison of warm and cold country Content: Continents and oceans, equator, north/south poles, compass points, types of weather (including symbols). Detailed weather report Horizontal Links: All aspects of learning plotted on the map. Diagonal Links: YR2 History – Seas etc Science links: Seasons	How do artists use colour and shape? Prior learning: Colour exploration EYFS Content: Mondrian •Kandinsky •Pollock Georgia O'Keefe •Primary colours •Secondary colours •Secondary colours •Neutral colours •Neutral colours •Warm colours •Cool colours •Shade •Tints •Abstract Art Horizontal Links: Science Steam engine art Diagonal Links: Science yr 3 LIGHT Abstract Art paint / pastel	A Wonderful Welcome Prior Learning: Easter – EYFS An introduction to the Easter Story. Content: An in depth look at Palm Sunday as the start of Holy Week. Horizontal Links: EYFS Easter Christmas – religious stories, Jesus and Christianity. Diagonal Links: Y2 History – explorers and travelling. Y2 RE Judaism and Passover	INDIA: History: British Empire / Indus people – one of the world's first civilisations. Geography – Continent / Capital / Animals found in India (Only country were both lions and tigers live– Dangers to them? / Monsoon season / Water that surrounds India – Indian Ocean, Arabian Sea, Bay of Bengal / Main river – Ganges / Flag RE: Main is Hinduism / most important festival Diwali ART: Historical and now – colour / pattern / Popular instrument – Sitar / Culture: Women wear saris / men wear dhotis / Cows are sacred / most people are vegetarian / Rudyard Kipling – English author who spent his childhood and young adult in India – Inspired Just So stories and The Jungle Book	How did Stockton get us moving? Content: Stockton Railway George Stephenson Rocket Stem power Horizontal Links: DT year 1 History Autumn 1 Diagonal Links: Year 3 Pneumatics Year 2 Geography Year 5 – Victorian History Year 6 WW1 and 2

	Who was the most	How are Christmas	What are the	How do artists	The Last Supper	USA	How did Neolithic
	significant explorer	and	similarities and	use shape?		UUA	families live?
	– Francis Drake or	Hannukah similar and	differences	Content:	Prior Learning:	History & Geography –	
	James Cook?	different?	between Teesside	 Henry Moore 	Easter – EYFS and	Plot where the population	Content:
	Content:	30 B	and Cairo?	 Antony Gormley 	Y1	of America have come	•Stone Age
	Francis Drake	Content:	Content:	•Dennis Oppenhein	An introduction to the	from over time / The	 Palaeolithic Period
	•Career	1.What the	Human Geography	Barbra Hepworth	Easter Story/Palm	indigenous population /	 Mesolithic Period
	 Privateer or Pirate? 	key beliefs of	Physical	•Sculpture	Sunday	How the Flag shows that	 Neolithic Period
	 Around the world 	Christianity are.	Geography	 3 Dimensional 		landmarks – human and	•Tools
	James Cook	2.The sacred events of	Capital Cities of the	•Carving	Content:	Physical / Mississippi	 Settlement
	•Career	The Nativity.	UK countries	•Chiselling	An in depth look at	river/	Horizontal Links:
	 Expeditions 	Who the important	4 Seas around UK	 Modelling 	the events of	Science: Habitats and	Food and nutrition
	•Ships	Christian fig <mark>ures</mark> in our	Teesside – River	 Casting 	Maundy Thursday	climate	
	 Discoveries 	communit <mark>y ar</mark> e.	Tees	 Types of Sculpture 	and the Last Supper.	RE: What religions can	Diagonal Links: Year
	Horizontal Links:	3.How and why	Cairo capital City of	Recycling to	An introduction to the	APT: Historical and now	1 History Aut 1
	Diagonal Links: yr1	Christmas is important	Egypt	create an	12 disciples and the		Geography land use
	Geography	to Christians	Atlas	Abstract	emotion felt by	Culture: how their	and settlement (3,5)
		Christian symbols and		Sculpture	Christians during	immigrants influence this	
		how they express	Horizontal Links:	- 15 GOY	Holy Week.	Significant things /	
		religious meaning.	History Aut 1	Horizontal Links:	Connectivity between	people – Space race and	
		4.What Christians do in	Diagonal Links:	Geog	Passover and Holy	Walk on the moon / Barak	
		school to celebrate.	Year 1 History, Year	Diagonal Links:	Week.	Obama	
N		1 What the key halists of	Year 5 Settlement	Year 1 / 2 Science			
L		I doiom oro	in Equat	Materials	Horizontal Links		
ee		2 The story of	шедурі	SCIENCE	PE Judaism		
≻		Hanukkah	Science: PLANTS	Chemistry	Passover and	R. C.	
		3 lewish symbols and	any common to	everyday	Hannukah as		
		how they express	Teesside / Cairo	materials	significant festivals		
		religious meaning.			Christmas – religious		
		The celebrations	6.1 3.3		stories. Jesus and		
		involved in the festival of			Christianity.		
		Hanukkah and where			,		
		these take place.	NU		Diagonal Links:		
					RE		
		Horizontal Links:			Y3 – Christianity		
		Summer 1 - USA			Y5 – Pilgrimage		
		Diagonal Links:			ART		
		Henry VIII yr4			Y4		
		Conflict Yr3 and Yr6					
		Yr 6 Russia					

	Autumn 1	Autumn 2	Spring 1	Spring 2	1 week	Summer 1	Summer 2	
Spotlight	History	RE	Geography	Art	EASTER	Reflect and review	History	
Year 4	Vikings: Ruthless killers or peaceful settlers? Content: Complex terms : BCE / CE •Viking timeline •Raiders from the north •Lindisfarne •Trade •Invasion •Danelaw •Laws •Society •Legacy Horizontal Links: biology (humans) Diagonal Links: Yr 3 Anglo Saxons Geography Continents / oceans	 Sikhism: What are the key beliefs of Sikhism? Key beliefs of Sikhism What the Gurus of Sikhism say about God, the world and human life. Guru Nanak – his life and teachings. How the 5Ks are symbolic to Sikhs. How do Sikhs do what is expected of them in today's world. Horizontal links: Peace and conflict – History / Global Curriculum READING – classic texts and appreciation Diagonal Links: Influential people: Boudicca, James Cook and Drake, Henry VIII, 	How have rivers and seas influenced where we live? Content: Significant trade routes in and out of UK. Significant rivers in the UK Definition of River Journey of a river Economic effects of a river Horizontal Links: Settling Vikings Neolithic Yr2 Teesside Diagonal Links: Year 1 History – Trains Year 2 Neolithic SCIENCE: Chemistry: Water Cycle	How do artists represent real life? Content: •Michelangelo 1475 – 1564 •The Pieta •Statue of David •Sistine Chapel •Italian Renaissance •Sculpture •Working with Clay *Augusta Savage 1892 – 1962 Clay Sculpture Horizontal Links: Christian statues – RE Diagonal Links: Year 6 History – ART taken in War	Prior Learning: Y1/Y2/Y3 The major events of Holy Week. Content: An in depth look at the events of Easter Sunday and the resurrection of Jesus Christ. Horizontal Links: RE – Influential leaders - Sikhism Diagonal Links: RE Y1/2/3 Christianity and Judaism. Y5 – Pilgrimage	South America History: Earliest recorded civilisation Peru – Colonised late 15 th Century mainly by Span and Portugal (also Dutch. British and French) Indigenous population Geography – The Amazon River / The Amazon	What was the significance of Henry VIII's brake with Rome? Content; •Who was Henry VIII •Significant dates linked with marriages and break with Rome •Catholic Faith •Protestant Faith •Protestant Faith •Persecution •Parliament •Wealth Horizontal Links: RE Christian beliefs Diagonal Links: Builds on: Christianity	
Academy								
	auc.							

Spotlight History RE Geography Art EASTER Reflect and review History What were the risk: Digrimage Digrimage Comment Argan Argan Argan Argan Content: Timeline Content: Content: Comportion Argan Arga
 What were the risks of a poor family in the process of the proces of the process of the process of the proces of the process of

SpotlightHistoryREGeographyAttEASTERReflect and reviewHistoryWhat was life like in the members structured content: -Content: -Content: -CrauseWhat are the key the members structured -Content: -CrauseWhat are the key the frame of the key the members structured -Content: -CrauseThe UK and North are the frame of the key the form of the key the members structured -CrauseThe UK and North are the form of the key the members structured -CrauseHow do artists the members structured -CrauseJudas iscariot How of a parsecuted during the key the members structured -Crause structur
What was life like in the trenches during WW? What was life like in the trenches during WW? What was life like in the trenches during Slam? What was persecuted balls of the trenches during without a brush? Judas Issariot- Hore or Trainot Will out a brush? RUSSIA: Who was persecuted during the Mazl regiona culture 1933 • Content: • Crause • Fifed • Trench life • Trench lod) The W are the key balls • Auty of the spected of • Auty of the spected • Auty of the spected • Auty of the spected • Auty of the spected of • Auty of the spected • Auty of the spect

Harrow Gate Primary Academy History Big Ideas





HISTORY PROGRESS GRID

		Procedural Knowledge								
	Declarative Knowledge	Evidence	Enquiry (Interpretation, cause, change, similarities / difference, significance)	Communication						
Chronology: As th	Chronology: As the children progress through school their timeline will naturally develop showing all history taught.									
 National Curriculum PoS: Year 1 Changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life Events beyond living memory that are significant nationally or globally Significant historical events, people and places in their own locality. The lives of significant individuals in the past who have contributed to national and international achievements 										
Have children always lived like me?	 Food Stockton History School Toys 	To use historical sources: Photographs People (living) Video Artefacts Books	 Using a chronological framework (NOT a date timeline) Begin to identify how they are the same and different to given historical subject 	 Verbally: Answering a simple question using the evidence and historical vocabulary Written Label / simple recount 						
Local Study: How did Stockton get people moving?	 Stockton – Darlington Railway Steam locomotives George Stephenson The Rocket 		2rg							
National Curriculu	im PoS: Year 2	·								
 Events beyond living memory that are significant nationally or globally The lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods Significant historical events, people and places in their own locality. Changes in Britain from the Stone Age to the Iron Age 										
Who was the most significant explorer, Francis Drake or James Cook?	Francis Drake Career Privateer or Pirate? Around the world James Cook Career Expeditions Ships Discoveries 	To use historical sources: Newspapers Letters Diaries Travel narrative	 Use a chronological framework – SIMPLE TIMELINE Identify ways in which we could find out about the past. Use a given historical account / story can identify similarities and differences between now and then. 	 Verbally: Ask a simple question using historical vocabulary Discuss the effectiveness of sources Written: Write a guided extended answer to a historical question. 						

		Procedural Knowledge					
	Declarative Knowledge	Evidence	Enquiry (Interpretation, cause, change, similarities / difference, significance)	Communication			
Chronology: As the	e children progress through sc	hool their timeline will naturally de	velop showing all history taught.				
How did Neolithic families live?	 Stone Age Palaeolithic Period Mesolithic Period Neolithic Period Tools Settlement PoS: Year 3 d sometimes devise historically value of relevance 	alid questions about change, cause, s	imilarity and difference. They should a	construct informed responses that past is constructed from a range of			
 the Roman Empir Britain's settleme 	re and its impact on Britain nt by Anglo-Saxons						
Boudicca – Heroin or Villain? Who were the Anglo Saxons and what happened to them?	 Primary and Secondary sources Romans Celts Life - culture Boudicca Boudicca's revolt Immigration Counties Christianity Alfred the Great 1066 William the Conqueror 	To use historical sources: • Hand written manuscripts • Art • Witness statements • Books • Museum / visit	 Use a timeline to order events To identify an opinion in a source. To understand different versions of the past may exist and give reasons for this To identify reasons for and results of peoples actions cause 	 Verbally: Question why things happen and give explanations Written: Write a clear and cohesive guided response using PEEL (point evidence explanation link) 			
Establish 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. • The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor • A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066							
Vikings: Ruthless killers or peaceful settlers?	Complex terms : BCE / CE Viking timeline Raiders from the north Lindisfarne Trade Invasion Danelaw 	To use historical sources: Art Maps Religious diaries Witness statements Journals Poems and songs	 Use dates and terms related to the passing of time Look for links and affects in time studied connections Offer a reasonable explanation for events 	 Verbally: Articulate own opinion of a historical event / story Written Write a clear and cohesive guided response using PEEL 			

		Procedural Knowledge					
	Declarative Knowledge	Evidence	Enquiry (Interpretation, cause, change, similarities / difference, significance)	Communication			
Chronology: As the	e children progress through sc	hool their timeline will naturally de	velop showing all history taught.				
What was the significance of Henry VIII brake with Rome?	 Laws Society Legacy Who was Henry VIII Significant dates linked with marriages and break with Rome Catholic Faith Protestant Faith Persecution Parliament Wealth 	To use historical sources: Art Maps Religious diaries Witness statements Journals Poems and songs	 Recognise the significance of a historical event on future life. Use dates and terms related to the passing of time Look for links and affects in time studied connections Offer a reasonable explanation for events Recognise the significance of a historical event on future life. 	 which incorporates their own findings. Verbally: Articulate own opinion of a historical event / story Written Write a clear and cohesive guided response using PEEL which incorporates their own findings. 			
 National Curriculum PoS: Year 5 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. A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 The achievements of the earliest civilizations – an overview of where and when the first civilizations appeared 							
What were the risks to a poor	TimelineHealth	To use historical sources: Buildings	Confidently use dates and terms related to the passing of	Verbally:Formulate a speech based on			

-				-	Confidentity ase dates and		Sanji
•	Health	•	Buildings		terms related to the passing of	•	Formulate a speech based on
•	Child Labour	•	Newspapers		time	ł	a historical event
•	Housing	•	Government documents	•	Consider different aspects of	Wri	tten
•	Poverty – bias and opinion	•	Maps		the life of different people /	•	Construct informed responses
•	Crime	•	Art		classes. contrasts	l	that involve thoughtful
•	Society	•	Photographs	•	Compare life in early and late		selection and organisation of
•	Nile – continent, countries	•	Court documents		times studied trend over time	l	relevant historical information
	and size	•	Archaeology			ł	
•	Ancient Egypt cities					ł	
•	Ancient Egypt transport					l	
•	Ancient Egypt Technology					ł	
•	Trade and civilisation						
	• • • • • • • • •	 Health Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt transport Ancient Egypt Technology Trade and civilisation 	 Health Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt Technology Trade and civilisation 	 Health Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt Technology Trade and civilisation 	 Health Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt Technology Trade and civilisation Case indicated of a contract of a co	 Health Buildings Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt Technology Trade and civilisation Housing Buildings Newspapers Government documents Maps Court documents Art Court documents Archaeology Ancient Egypt Technology Trade and civilisation Court documents Archaeology Court documents Archaeology Ancient Egypt Technology Trade and civilisation Court documents Archaeology Court documents Court documents Archaeology Court documents Archaeology Court documents Archaeology Court documents Court documents Court documents Court documents Archaeology Court documents Court documents<th> Health Buildings Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt transport Ancient Egypt Technology Trade and civilisation Court documents Archaeology Ancient Egypt Technology Trade and civilisation Court documents Archaeology Court documents Archaeology Court documents Archaeology Court documents Archaeology Ancient Egypt Technology Trade and civilisation Court documents Court documents Archaeology Court documents Archaeology Court documents Court documents Court documents Archaeology Court documents Court documents Court documents Court documents Court documents Archaeology Court documents Court documents</th>	 Health Buildings Child Labour Housing Poverty – bias and opinion Crime Society Nile – continent, countries and size Ancient Egypt cities Ancient Egypt transport Ancient Egypt Technology Trade and civilisation Court documents Archaeology Ancient Egypt Technology Trade and civilisation Court documents Archaeology Court documents Archaeology Court documents Archaeology Court documents Archaeology Ancient Egypt Technology Trade and civilisation Court documents Court documents Archaeology Court documents Archaeology Court documents Court documents Court documents Archaeology Court documents Court documents Court documents Court documents Court documents Archaeology Court documents Court documents

			Procedural Knowledge	
	Declarative Knowledge	Evidence	Enquiry (Interpretation, cause, change, similarities / difference, significance)	Communication
Chronology: As the	e children progress through sc	hool their timeline will naturally de	velop showing all history taught.	
Ø	• Empire	Gate	Q	
National Curriculu	Im PoS: Year 6			
They should note con devise historically val selection and organis • a local history stu • a study of an asp	nections, contrasts and trends ov id questions about change, cause ation of relevant historical informa idy ect or theme in British history that	er time and develop the appropriate u e, similarity and difference, and signific ation. They should understand how ou extends pupils' chronological knowle	ise of historical terms. They should re cance. They should construct informed r knowledge of the past is constructed dge beyond 1066	gularly address and sometimes d responses that involve thoughtful d from a range of sources.
What was life like	Cause	To use historical sources:	To use historical sources to	Verbally:
in the trenches during WW1? Who was persecuted during the Nazi regime and why?	 Effect Trench life Propaganda The soldiers German culture 1933 Success of the Jews The Nazi party Propaganda Rise of The Nazi Party 1933 – 1945 Persecution of minorities Persecution of Jews 	 Posters Leaflets Speeches Witness statements Poetry Letters Photographs News reels Telegrams 	 identify trends To question the validity of sources – propaganda / fake news Identify how belief can have an impact on historical events 	 Debate defending their position linked to a historical event. Written Analyse / explain reasons for, and results of, historical events, situations, changes.
		Tcade	ms	

Harrow Gate Primary Academy Religious Education Big Ideas

RELIGIOUS EDUCATION PROGRESS GRID

Year Group	Decl	arative Knowledge	Procedural Knowledge				
	1. Belie 2. Teac 3. Wor 4. Impa	ef chings/Authority ship act of Faith	AT1 Learning about religion and worldviews Describe Identify Explain Interpret Analyse Use Specialist Vocabulary	AT2 Learning from religion and worldviews Reflect Express Empathise Apply Interpret Evaluate			
Year 1 How are Christmas and Diwali similar and different?	 What Chris The I to Ch Chris celeb Chris of wc What child. Secu Chris What Diwa The S and i Hindu worsi What celeb Hindu worsi What child. 	t Christians believe about stmas. Nativity and its importance pristians. stian beliefs and how they prate Christmas. stian symbols and places orship. t is expected of a Christian ular traditions at stmas. t Hindus believe about li. Story of Rama and Sita ts importance to Hindus. u beliefs and how they prate Diwali. u symbols and places of hip. t is expected of a Hindu	 Describe key features of a religion using specialist vocabulary. Identify stories and key religious symbols Christmas – cross Diwali – aum Start to show awareness of similarities in religions. 	 Reflect on personal experiences and express own viewpoint. Talk about what they find interesting or puzzling about religion. Talk about what is of value to them and what concerns them. Empathise with the experiences of others. Ensure that secularism and traditions are covered as this will possibly be the predominant experience. 			
Year 2 How are Christmas and Hanukkah similar and different?	 What Chris The s Nativ Who figure How impo Chris they mear 	t the key beliefs of stianity are. sacred events of The vity. the important Christian es in our community are. and why Christmas is rtant to Christians stian symbols and how express religious hing.	 Use religious words and phrases to describe and identify some features of religion. Explain the importance of religion for some people. Show awareness of similarities in religions. Old testament/Torah, Moses, December, prayer and worship during festival. Retell religious stories. Build on knowledge of The Nativity and introduce new story of The Maccabees and the Temple. Suggest meanings for religious actions and symbols. 	 Ask, and respond sensitively to, questions about their own and others' experiences and feelings. Recognise that some questions cause people to wonder and are difficult to answer. Recognise their own values and those of others in matters of right and wrong. Ten Commandments and rules are a great link here - also The Maccabees issue of not praying to another God is an interesting discussion point. 			

Year Group	Declarative Knowledge	Procedural Knowledge				
	 Belief Teachings/Authority Worship Impact of Faith 	AT1 Learning about religion and worldviews Describe Identify Explain Interpret Analyse Use Specialist Vocabulary	AT2 Learning from religion and worldviews Reflect Express Empathise Apply Interpret Evaluate			
	4. What Christians do in school to celebrate.	 Use all symbols on unit plan. Identify how religion is expressed in different ways. 				
	 What the key beliefs of Judaism are. The story of Hanukkah. Jewish symbols and how they express religious meaning. The celebrations involved in the festival of Hanukkah and where these take place. 		SO SO			
Year 3 Are all Christian churches the same and do all Christians believe the same thing?	 What different Christian denominations believe about their faith. The Bible outlines Jesus' words to his disciples. The Bible gives two accounts of the Christmas Story. How Christians worship and why they carry out particular rituals. How places of worship and religious symbols differ/are similar for different Christian denominations. The expectations of Christian communities. 	 Use a developing religious vocabulary to describe some key features of religions, recognising similarities and differences. Make links between beliefs and sources, including religious stories and sacred texts. Look at the Bible as a source – Christians believe that The Lord's Prayer (Matthew 6: 5-13) consists of the words that Jesus gave directly to his followers. There are also two different accounts of the Christmas Story that they already know. What questions does this illicit in terms of source validity and sacred texts? Identify the impact religion has on believers' lives. Reflect on worldviews held by many people. 	 Identify what influences ourselves, making links between aspects of their own and others' experiences. Ask important questions about religion and beliefs, making links between their own and others' responses. Make links between values and commitments, and their own attitudes and behaviour. 			

Year Group	Declarative Knowledge	Procedural Knowledge				
	 Belief Teachings/Authority Worship Impact of Faith 	AT1 Learning about religion and worldviews Describe Identify Explain Interpret Analyse Use Specialist Vocabulary	AT2 Learning from religion and worldviews Reflect Express Empathise Apply Interpret Evaluate			
Year 4 What are the key beliefs of Sikhism?	 Key beliefs of Sikhism What the Gurus of Sikhism say about God, the world and human life. Guru Nanak – his life and teachings. How the 5Ks are symbolic to Sikhs. How do Sikhs do what is expected of them in today's world. 	 Use a developing religious vocabulary to describe and show understanding of sources, practices, beliefs, ideas, feelings and experiences. Make links between them, and describe some similarities and differences both within and between religions and worldviews. Discuss overlaps with previous learning – Hinduism, Christianity and Judaism. Describe the impact of religions and worldviews on people's lives. Discuss equality and or the carrying of the Kirpan. Suggest meanings for a range of forms of religious expression. Use the 5ks to aid discussion. 	 Raise, and suggest answers to, questions of identity, belonging, meaning, purpose, truth, values and commitments. Apply their ideas to their own and other people's lives. Describe what inspires and influences themselves and others. Sikhism is a fantastic opportunity to think about inspirational people who have changed the status quo - look at the range of biographies in the library as a starting point if children cannot identify their own. 			
Year 5 Pilgrimage	 Key beliefs of Buddhism What religious sources and texts say about pilgrimage/life and death The impact of influential and inspirational people on worship and pilgrimage. Where do religious followers go on pilgrimage and why do they do this How do followers worship when they are there and how do they express their religious and spiritual ideas What do different religions believe about life after death What is expected of a person in following a religion or a worldview. 	 Use an increasingly wide religious vocabulary to explain the impact of beliefs on individuals and communities. Revision of all previous religions taught 1- 4. Describe why people belong to religions or worldviews. Understand that similarities and differences illustrate distinctive beliefs within and between religions, and worldviews, and suggest possible reasons for this. Focus on reasons for pilgrimage. They explain how religious sources are used to provide answers to ultimate questions and ethical issues, recognising diversity in forms of religious, spiritual and moral expression, within and between religions. In terms of pilgrimage sites there are many of the sacred texts that can be referred to as sources – these are listed in the unit plan. 	 Ask, and suggest answers to, questions of identity, belonging, meaning, purpose, truth, values and commitments, relating them to their own and others' lives. Do we make pilgrimages in the secular world? Where do we travel to remember? They explain what inspires and influences them, expressing their own and others' views on the challenges of belonging to a religion. A possible question would be – where would be your pilgrimage site and what would people do to remember your actions and deeds when they got there? There is also lots of discussion to be had about how close in proximity some of the sites are. This will link to overlaps in belief – Christianity/Judaism and Hinduism/Sikhism. 			

Year Group	Declarative Knowledge	Procedural	Knowledge
	 Belief Teachings/Authority Worship Impact of Faith 	AT1 Learning about religion and worldviews Describe Identify Explain Interpret Analyse Use Specialist Vocabulary	AT2 Learning from religion and worldviews Reflect Express Empathise Apply Interpret Evaluate
Year 6 What are the key beliefs of Islam?	 Key beliefs of Islam Holy scripture and Key Leaders – Prophet Mohammed pbuh Symbols, worship, important places and pilgrimage What is expected of a Muslim How do they practice their faith and what contribution does this make to local life How do Muslims respond to global issues, human rights, fairness, social justice and environmental issues 	 Use religious and philosophical vocabulary to give informed accounts of religions and worldviews, explaining the reasons for diversity within and between them. Explain why the impact of religions and beliefs on individuals, communities and societies varies. Interpret sources and arguments, explaining the reasons that are used in different ways by different traditions to provide answers to ultimate questions and ethical issues. Interpret the significance of different forms of religious, spiritual and moral expression. 	 Use reasoning and examples to express insights into beliefs, teachings and world issues. Express insights into their own and others' views on questions of identity and belonging, meaning, purpose and truth. Consider the challenges of belonging to a religion in the contemporary world, focusing on values and commitments. Articulate personal and critical responses to questions of meaning, purpose and truth, and ethical issues. Evaluate the significance of religious and other views for understanding questions of human relationships, belonging, identity, society, values and commitments, using appropriate evidence and examples.

RELIGIOUS EDUCATION OUTCOMES

Year Group	Main	End of Term Outcome/Celebration
	Focus	
Year 1 How are Christmas and Diwali similar and different?		KS1 Christmas Concert
Year 2 How are Christmas and Hanukkah similar and different?	38 ⁸⁷⁷ 8 6 6 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 9 8 9	Hanukkah party and KS1 Christmas Concert
Year 3 Are all Christian churches the same and do all Christians believe the same thing?		Church Visit - Christmas Service Whole school or Y3 visit - organisation of whole school church service will take place every other year.
Year 4 What are the key beliefs of Sikhism?	Ĩ	Celebration of Guru Nanak's birthday – Monday 30 th November 2020 Christmas collection for local foodbank
Year 5 Pilgrimage	' XT	Plan a Christian pilgrimage to Bethlehem – perhaps an advert or double travel leaflet.
Year 6 What are the key beliefs of Islam?		Question and answer session with local Imam.

EASTER

Year Group	Easter Focus
Year 1	 A focus on Palm Sunday. Personal experiences of both being welcomed and welcoming others.
Year 2	 A focus on Maundy Thursday and the events of the Last Supper. A focus on what the Last Supper represents in Christianity. Personal experiences of special meals. Look at links between Passover and Easter
Year 3	 A focus on Good Friday. A look at the events of Jesus's crucifixion and what this means to Christians.
Year 4	 A focus on Easter Sunday. A look at Jesus's resurrection and what this means to Christians.
Year 5	A look at where our Easter traditions originate.
Year 6	A focus on the actions of Judas Iscariot in Holy Week.

GEOGRAPHY PROGRESS GRID

	National Curriculum PoS			Declarative	Procedural Knowledge		
	Locational Knowledge	Place Knowledge	Human and Physical Geography	Graphical skills and Field work	Knowledge	Fieldwork	Map work
Year 1 What is the weather like around the world? Science Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies	Name and locate the world's seven continents and five oceans use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage		identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles	use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map	 Seven continents Five oceans Season names Season times Countries of the UK Equator North and South pole 4 Compass points 	making tables and charts <i>about the</i> <i>weather</i> (block graphs, pictograms, tally charts) observations of <i>seasons</i> over time, including through the use of sketches and photographs	use world maps and globes to identify the United Kingdom and its countries use simple compass directions (North, South, East and West) to plan a simple journey across the continents
Year 2 What are the similarities and differences between Teesside and Cairo?	name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas	Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non- European country	use basic geographical vocabulary to refer to: key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop	use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key use simple fieldwork and observational skills to study the geography	 Human Geography Physical Geography Definition of Ocean Definition of Sea Capital Cities of the UK countries 4 Seas around UK Teesside – River Tees Cairo capital City of Egypt Egypt in Africa River Nile Atlas 	making tables and charts to show data collected from local and school fieldwork (block graphs, pictograms, tally charts) that focusses on human and physical geography Use Venn and Carroll diagrams to compare similarities and differences	Use world maps and globes to identify the country of Egypt and the Mediterranean sea. Use atlases to identify Teesside (including Stockton, Middlesbrough, Billingham, Thornaby, Redcar) in the UK and Cairo and the River Nile in Egypt Use aerial photographs and plan perspectives to recognise landmarks: (Teesside - transporter bridge, Bottle of Notes, Roseberry Topping, Tees. Cairo – Pyramids of Giza, Sphinx, Nile) Devise a simple map of the local area; and use and construct basic symbols in a key

	National Curriculum PoS			Declarative	Procedural Knowledge		
	Locational Knowledge	Place Knowledge	Human and Physical Geography	Graphical skills and Field work	Knowledge	Fieldwork	Map work
			Go	of their school and its grounds and the key human and physical features of its surrounding environment.	0		
Year 3 How do volcanoes & earthquakes affect peoples' lives?	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)	Understand geographical similarities and differences through studying the human and physical geography	describe and understand key aspects of: physical geography, including: climate zones, vegetation belts, rivers, mountains, volcanoes and earthquakes	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.	 Volcano definition Volcano features / vocab Earthquake definition Tectonic plates The Ring of Fire Volcanos in Italy, Philippines, Japan and Mexico Grid references Map symbols 	Data – Use of time Zones in graphs and changing	Eight point compass 4 figure grid reference Using an Atlas, Globe, digital computer software
Year 4 How have rivers and seas influenced where we live? Science: Water Cycle	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	Understand geographical similarities and differences through studying the human and physical geography	describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle	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	 Seas around UK Significant trade routes in and out of UK. Significant rivers in the UK Definition of River Journey of a river Water cycle Economic effects of a river Erosion 	Field sketch – river to its source – Teesside Industry on the river	Locations of rivers 4 grid reference Eight point compass

	National Curriculum PoS			Declarative	Procedural Knowledge		
	Locational Knowledge	Place Knowledge	Human and Physical Geography	Graphical skills and Field work	Knowledge	Fieldwork	Map work
	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), and land-use patterns; and understand how some of these aspects have changed over time	N	Go	te	0		
Year 5 How is the UK's economy driven by land use?	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 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), and land-use patterns; and understand how some of these aspects have changed over time	Understand geographical similarities and differences through studying the human and physical geography	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	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	 Land use 6 Types of land use Settlement County City Counties of England Major cities of UK UK economic activity OS map symbols for Land Use 	OS mapping in contrasting local areas – Danby and Teesside Data Population Graphs, Land Use data	Use of Ordinance survey maps to identify Land Use, Counties, Cities, Population 6 Figure Grid Reference 8 point compass

	National Curriculum PoS			Declarative	Procedural Knowledge		
	Locational Knowledge	Place Knowledge	Human and Physical Geography	Graphical skills and Field work	Knowledge	Fieldwork	Map work
Year 6 The UK and North America – what are the differences and the similarities? A study of physical geography	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 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), and land-use patterns; and understand how some of these aspects have changed over time identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)	understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America	describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcances and earthquakes, and 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	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 to build their knowledge of the United Kingdom and the wider world 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.	 Climate Zones Biome Vegetation regions UK geographical facts North America Geographical facts 	Field sketches Population Data and Data relating to the main zones of investigation	Use of Ordinance survey maps to identify Land Use, Counties, Cities, Population 6 Figure Grid Reference 8 point compass

Harrow Gate Primary Academy Art Big Ideas

ART KEY FOCUS

Perspective Art Filippo Brunelleschi 1377 - 1446 Leonardo DaVinci 1442 - 1519 Allens Pietro Peruguino 1446 - 1523 Henry Moore Silvestre Santiago (Pejac)

ART PROGRESS GRID

	Declarative Knowledge	Procedural Knowledge						
		Drawing	Painting and Pastels	3D work Sculpture	Collage	Printing	Digital Media	Textiles
 National Curr to use a rang to use drawir to develop a about the wo their own wo 	 iculum PoS Year 1 ge of materials creatively to design and ng, painting and sculpture to develo wide range of art and design techn ork of a range of artists, craft makers rk. Mondrian Kandinsky 	and make products op and share their i- iques in using colo s and designers, do Explores tone using different	deas, experiences ur, pattern, textur escribing the diffe Represents things observed,	s and imagination e, line, shape, for rences and simila	m and space arities between di	fferent practice:	s and disciplines, an *Use digital media to create	d making links to
How do artists use colour and pattern?	 Pollock Georgia O'Keefe Primary colours Secondary colours Tertiary colours Neutral colours Warm colours Cool colours Shade Tints Abstract Art 	grades of pencil, pastel and chalk	remembered or imagined, using colour/tools *Introduces different types of brushes for specific purposes *Explores the effect on paint of adding water or neutral colours *Introduces primary and secondary colours with the addition of black and white and other hues *Creates different effects by using a variety of tools and techniques such as dots, scratches and splashes *Uses different methods, colour and a variety of tools and techniques to express mood.				an abstract representation.	

	Declarative Knowledge			Pro	cedural Knowle	dge		
		Drawing	Painting and Pastels	3D work	Collage	Printing	Digital Media	Textiles
National Curri	culum PoS Year 2		1 031013					
 to use a range 	of materials creatively to design a	nd make products	;					
 to use drawing 	, painting and sculpture to develop	and share their id	deas, experience	s and imagination				
• to develop a w	vide range of art and design technic	ues in using colo	ur, pattern, textur	e, line, shape, form	n and space			
 about the work 	k of a range of artists, craft makers	and designers, de	escribing the diffe	erences and similari	ities between diff	erent practices ar	nd disciplines, and	d making links to
their own work	ζ.	C	Ū			·	•	Ū
	Henry Moore	*Uses line and		*Experiments				
	Antony Gormley	tone to		with basic tools				
	Dennis Oppenheim	seen		plastic materials				
	Sculpture	remembered or		*Compares and				
	3 Dimensional	observed		recreates form				
	Carving	*Explores		and shape to				
	Chiselling	shading, using		natural and				
C:	Modelling	Draws familiar		environments				
d	Casting	things from		*Creates texture				
ha	I ypes of Sculpture	different		using rigid and				
S		viewpoints		plastic materials				
ISE		"Uses line, tone		and a variety of				
D (S		represent things		*Uses stimuli to				
sta		seen,		create simple 2D				
Ë		remembered or		and 3D images				
a		imagined		using a variety of				
op				tools and				
3				*Recreates 2D				
Ŷ				images in a 3D				
–				piece				
				*Shows an				
				texture form and				
				shape by				
				recreating an				
				image in 3D				
				torm				

	Declarative Knowledge	Procedural Knowledge							
		Drawing	Painting and Pastels	3D work Sculpture	Collage	Printing	Digital Media	Textiles	
National Curri Pupils should be t kinds of art, craft a to create sket to improve the about great an	Vational Curriculum PoS Year 3 Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design. • 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.								
How are artists inspired by nature?	 Claude Monet 1840 – 1926 Pierre-Auguste Renoir 1841 – 1919 Impressionism Collage Textiles Stitching Sketching 		*Uses different methods, colour and a variety of tools and techniques to express mood *Investigates symbols, shapes, form and composition *Uses techniques, colours, tools and effects to represent things seen, remembered or imagined		*Develops skills of overlapping and overlapping and overlapping and overlaping *Develops awareness of contrasts in texture and colour *Uses the natural environment or townscapes as a stimulus *Selects and uses materials to achieve a specific outcome *Embellishes, using a variety of techniques, including drawing, painting and printing *Develops experience in embellishing, using more advanced stitching and appliqué techniques *Applies knowledge of different techniques as a form of expression *Designs an artefact, using knowledge of techniques, for a specific outcome			*Simple stitching - uses a long needle to make straight stitches *Stitches and cuts threads and fibres *Weaves paper, progressing from one to two colours *Develops an awareness of the natural environment through colour matching *Uses plaiting, pinning, stapling, stitching and sewing techniques *Stitching - using various needles to produce more complex patterns	

	Declarative Knowledge	Procedural Knowledge							
		Drawing	Painting and Pastels	3D work Sculpture	Collage	Printing	Digital Media	Textiles	
National Curri	iculum PoS Year 4								
Pupils should be t kinds of art, craft	taught to develop their techniques, i and design.	ncluding their cor	trol and their use	e of materials, with	creativity, experi	mentation and a	n increasing aware	eness of different	
to create sket	ch books to record their observation	ns and use them t	o review and rev	risit ideas					
 to improve their mastery of art and design techniques, including drawing, and sculpture with a range of material: clay 									
 about great artists, architects and designers in history. 									
How can artists represent real life?	 Michelangelo 1475 – 1564 The Pieta Statue of David Sistine Chapel Italian Renaissance Sculpture Working with Clay 	*Uses line, tone and shade to represent things seen, remembered or imagined *Is happy to experiment with line, tone and shade *Uses a range of materials to produce line, tone and shade *Selects appropriate media and techniques to achieve a specific outcome		*Explores how stimuli can be used as a starting point for 3D work with a particular focus on form, shape. *Looks at 3D work from a variety of genres and cultures and develops own response through experimentation *Recreates images in 2D and 3D, looking at one area of experience *Makes imaginative use of the knowledge they have acquired tools techniques and materials to express own ideas and feelings					

	Declarative Knowledge	Procedural Knowledge						
		Drawing	Painting and Pastels	3D work Sculpture	Collage	Printing	Digital Media	Textiles
National Curri	iculum PoS Year 5			Comptano			1	
Pupils should be to kinds of art, craft a to create sket to improve the about great a	taught to develop their techniques, and design. tch books to record their observatio eir mastery of art and design techn rtists, architects and designers in h	including their col ns and use them iques, including di istory. *Selects	ntrol and their use to review and revis rawing, painting ar *Investigates	of materials, with sit ideas nd sculpture with a	creativity, experim	nentation and an ls [for example, p	increasing awarer encil, charcoal, pa	ness of different aint, clay]
How do artists use perspective?	 Leonardo DaVinci Pietro Peruguino Henry Moore Silvestre Santiago (Pejac) Perspective ART Forced perspective Photography 	appropriate media and techniques to achieve a specific outcome	symbols, shapes, form and composition *Uses techniques, colours, tools and effects to represent things seen, remembered or imagined *Explores the effect of light colour texture tone on natural and man-made objects				media to represent artistic ideas. *Is aware of all basic principles and processes of photography / digital media, together with its limitations	

GLOBAL CURRICULUM

Throughout the Harrow Gate curriculum there are identified opportunities to link the children into our Global curriculum. It encourages individuals to think deeply and critically about what is equitable and just, and what will minimise harm to our planet. Exploring Global Citizenship themes help learners grow more confident in standing up for their beliefs, and more skilled in evaluating the ethics and impact of their decisions.

A Global Citizen is someone who:

- is aware of the wider world and has a sense of their own role as a world citizen
- respects and values diversity
- has an understanding of how the world works
- is outraged by social injustice
- participates in the community at a range of levels, from the local to the global
- is willing to act to make the world a more equitable and sustainable place
- takes responsibility for their actions.

Opportunities are identified for teachers on each subject 'Unit Plan' and also throughout the year by the Geography Subject leader. Harrow Gate primary are committed to enabling the children with the skills and understanding for local and global issues and how they can influence, improve and change for improvement. We want our children to look wider than their own context and see how their influence can have impact.

The Global curriculum deals with issues of global interdependence, diversity of identities and cultures, sustainable development, peace & conflict and inequities of power, resources & respect.

It is crucial to be aware that, far from promoting one set of answers or values or attitudes, education for global citizenship encourages children and young people to explore, develop and express their own values and opinions. (Always requiring too that they listen to and respect other people's points of view.) This is an important step towards children and young people making informed choices as to how they exercise their own rights and their responsibilities to others.

It is also vital that our teachers do not approach the Global curriculum with the feeling that they must have all the answers – impossible anyway in such a fast changing world. The role of the teacher is to enable pupils to find out about their world for themselves and to support them as they learn to assess evidence, negotiate and work with others, solve problems and make informed decisions.



GLOBAL CURRICULUM PROCEDURAL KNOWLEDGE

	Critical Thinking	Empathy	Self-awareness and		Communication
			Reflection		
Yr1	Understand what a relevant question is Consider merits of different view points	What is empathy? Clear definition Show empathy for friends, family and school family Show empathy for characters in books	Identify matters that are important to me and to others Learn from mistakes and act on feedback	Ada	Take turns to express a view point Listen to others carefully and respectfully
Yr2	Understand what a relevant question is Consider merits of different view points	Show interest and concern for others outside of immediate circle Show interest and concern for others in contexts different to own	Identify connections between my actions and the affects they may have - locally - globally	pt behaviour to ne	Understand the functions of a discussion Know how to take part in a discussion Take part in discussions
	Use different approaches to solve problems			w cult loca	
Yr3	What is bias? What is opinion? Use evidence to support own view point	How does my behaviour affect the feelings of others? How can I adapt my behaviour to take into account the feelings of others?	Making connections between negative feelings towards someone and the behaviour towards them Cause – negative feelings Effect – behaviour towards them	ural environments: sc l community	Take part in discussions State opinions and give reasons for these
Yr4	What is bias? What is opinion? Use evidence to support own view point Assess different viewpoints Imagine alternative possibilities and suggest new ideas	How does my behaviour affect the feelings of others? How can I adapt my behaviour to take into account the feelings of others? Empathise with people in local and more distant contexts	Making connections between negative feelings towards someone and the behaviour towards them Cause – negative feelings Effect – behaviour towards them	hool visits, visitors and	Take part in discussions Communicate effectively through verbal communication: - use a strong confident speak voice - active listening - use carefully selected vocabulary

	Critical Thinking	Empathy	Self-awareness and	Communication						
Yr5	Use media and other sources to identify: - bias - stereotypes - a range of perspectives	How does my behaviour affect the feelings of others? How can I adapt my behaviour to take into account the feelings of others?	Identify own emotions and behaviours Reflect on emotions and behaviours	Take part in discussions Communicate effectively through verbal communication (see above) and also <u>non-verbal:</u> - body language - gestures						
	Keep mind open to new ideas	Empathise with people in local and more distant contexts Discern how people are feeling by reading: - body language - words - gestures - tone of voice Recognise how different backgrounds, beliefs and personalities affect behaviour and world views	Reflect and change behaviour effectively	 facial expressions closed and open body language 						
Yr6	Use media and other sources to identify: - bias - stereotypes - a range of perspectives Keep mind open to new ideas Analyse own and others' assumptions about people and issues	Recognise how different backgrounds, beliefs and personalities affect behaviour and world views Understand the impacts of prejudice and discrimination	Identify own emotions and behaviours Reflect on emotions and behaviours Reflect and change behaviour effectively	<u>'The art of debate'</u> Argue rationally and persuasively <u>Matter</u> – what you want to say <u>Manner</u> – how you say it <u>Method</u> – how you organise it						
	Academy									

GLOBAL CURRICULUM PROGRESS GRID

Yr1	airness means airness means hily Sim diffe peo com Me Frie Fan	versity nilarities and erences between ople in my mmunity: ends milies(cultures)	interdependence Similarities and differences between places: Stockton – London Stockton – UK rural Stockton – Europe Stockton – Asia (choose 1 place from	development <u>Choices and actions</u> How these affect: Me, friends, school community Choices and action about local and school	Conflict Conflict What is a conflict – clear definition Cause of conflict in: class / home	The Rights of the Child What are your basic human rights and how	governance Decision making What is decision making?
Yr1	airness means <u>Sim</u> diffe peo nily com Me Frie Fan	nilarities and ferences between ople in my mmunity: ends milies(cultures)	Similarities and differences between places: Stockton – London Stockton – UK rural Stockton – Europe Stockton – Asia (choose 1 place from	Choices and actions How these affect: Me, friends, school community Choices and action	Conflict What is a conflict – clear definition Cause of conflict in: class / home	The Rights of the Child What are your basic human rights and how	Decision making What is decision making?
			Europe and Asia)	environment: How are we damaging it? How can we improve it? <u>Concern</u> About environment – WASTE – resources etc Taking care of school – home and class	Ways to avoid conflict Ways of resolving conflict <u>Peace:</u> Clear definition How can we be 'bucket filers'	in: class, school and family	How can we take part in rulemaking in our class?
			Pa Belief: that people car	articipation: Inclusion of a make a difference on the	all ir own and with others		
What Fai	airness means Sim	nilarities and	Making links between	Choices and actions	Conflict	The Rights of the	Uneven sharing of
in:	diffe	erences between:	local community and	How some choices	What is a conflict –	Child	power
Yr2 Our comr poor The UK – south div	mmunity – rich / Me in th (– North / Me livide Self belo and	and wider context he UK and 1 other untry If-identity and onging: community d culture	Stockton – trade and jobs	and actions have an impact globally . LITTER: impact locally (landfill) and how this becomes global – rivers – seas What can we do? Reduce, reuse and recycle	Clear definition Cause of conflict in: class / home Ways to avoid conflict Ways of resolving conflict <u>Peace:</u> Clear definition	Who is responsible for ensuring this? How can we respect each other's rights?	How are some people excluded from decision making?

	Social justice	Identity and	Globalisation and	Sustainable	Peace and	Human Rights	Power and
	and equality	diversity	interdependence	development	conflict		governance
			Participation: Inc Belief: that people car	lusion of all and take part in make a difference on the	n decision making ir own and with others		
Yr3	Fairness: Are there excuses for not following rules? Accepting difference – inclusion and disability	Differences – Value What is the diversity of cultures in: school / Stockton / UK	How local actions can affect the world: Fair trade (Link to Geog Ring of Fire) Why What can school do?	Peoples dependency on the environment: Plants –food Trees – oxygen Wellbeing – Villages and indigenous population <u>Concern:</u> About our local environment – commitment to action for improvement Local Issues	Causes of Conflict Poor communication Misunderstanding Frustration How can we prevent and resolve conflict Win Win solutions	Universal Declaration of Human Rights UN Reasons why some people have their rights denied.	Why you need rules in a society. School society Community Country How people can take part in making and changing them
		Partic	ipation: Proactive Inclusion Belief: That indi	on – especially people who viduals and groups can im	o face barriers to participat	e fully	
Yr4	 Fairness: Review all learning <u>Causes of poverty</u>: Lack of access to a quality education Little or no access to livelihood or jobs Look at local and global examples 	Contributions How different cultures have contributed to our lives Music – dance – food – clothing - sport	How Local actions can affect the wider world Fair Trade Community Uk Global	Peoples dependency on the environment: Water – clean Care for rivers Care for the oceans – pollution What is Climate Change – Cause – Human / physical <u>Concern</u> Global concerns about the environments What can we do that impacts wider than locally?	Examples of Conflict Past and present in own society Political Science / Religion	Defending Human Rights Governments Citizens Society (Link to poverty – education / climate change)	Why you need rules in a society. School society Community Country How people can take part in making and changing them
			Participation: Sup Belief: Willingness to co	oporting others and encour operate with others to cha	aging participation Inge things for the better		
Yr5	Fairness: Review all learning Causes of poverty:	Prejudice What is Prejudice? What does it mean for: Me School Family	How actions Affect the wider world Fair Trade – how is this local and global	Effects of climate change Local and global <u>Concern</u>	Conflict Causes : Differences in values Differences in opinions Loss of respect	Current and historic human rights issues Influential people in this area	Governance How laws are passed How our country is governed

	Social justice	Identity and	Globalisation and	Sustainable	Peace and	Human Rights	Power and			
	and equality	diversity	interdependence	development	conflict		governance			
	Climate change = loss of lands / villages / livelihoods and jobs	Community Country World	Communication: Local MP decisions and how this impacts How do they represent us?	Concern about affects of lifestyles and consumer choices on people and planet. Concerns for future of planet and future generations	Examples of global conflict past and present Resolution and prevention of conflict	Slavery Segregation Votes for Women Fair pay Sexism Child labour etc	How is school governed			
			Participation: Willing Belief: Take	gness to reach agreement e an informed stance on g	through compromise lobal issues					
Yr6	<u>Fairness</u> Review and reflect yr group issues <u>Causes of poverty</u> Conflict Inequality – social – economic – gender – race - culture	Prejudice Nature of prejudice Racism and sexism Ways we can combat this	How actions Affect the wider world Fair Trade – how is this local and global <u>Communication</u> : Local MP decisions and how this impacts How do they represent us? The Press: Social media – getting your message out – Grethe Thumberg	Environmentally responsible living and global inequalities Ecological footprints Impact of climate change and footprints beyond self	Conditions for Justice and Peace 'Just War' theory Resolution	Current and historic human rights issues Influential people in this area Slavery Segregation Votes for Women Fair pay Sexism Child labour etc	Governance Global. Compare countries systems of governance Autocracy Democracy Oligarchy Communism			
		Belief: Take an informed	Participation: Commitme stance on global issues ar	nt to support diplomatic pr nd realise that people mak	ocess and own role in this e a greater difference whe	en take action collectively.				

MUSIC

Harrow Gate Primary Academy use a music scheme called 'Charanga'. Created by music specialists it builds the childrens knowledge and skills across all aspect of music

Learning progression Depth of learning through Charanga Musical School

National Curriculumn 2014:

"...learn to sing and to use their voices, to create and compose music on their own and with others, have the opportunity to learn a musical instrument, use technology appropriately and have the opportunity to progress to the next level of musical excellence..."

"Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory."

"Pupils should be taught to: play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression."



HISTORY OF MUSIC EXPLORED



The Interrelated Dimensions of Music

Progression through Charanga Musical School



Progression throughout the Units of Work reinforces the interrelated dimensions of music. With each new song, always start again with the foundation of pulse, then rhythm, then pitch, adding new dimensions as you progress.

This represents an ever increasing spiral of musical learning.



PHYSICAL EDUCATION

Champions is a Sports, Fitness and Health programme for Years 1 to 6. It is an holistic approach to the teaching of PE, which improves fitness, develops skills and deepens knowledge of health and wellbeing



Lesson build on prior skills and knowledge of a wide variety of sporting genre.

Champions Lessons



JIGSAW – THE MINDFUL APPROACH TO PSED

Jigsaw 3-11 offers a comprehensive Programme for Primary PSHE including statutory Relationships and Health Education, in a spiral, progressive and fully planned scheme of work, giving children relevant learning experiences to help them navigate their world and to develop positive relationships with themselves and others.



With strong emphasis on emotional literacy, building resilience and nurturing mental and physical health, Jigsaw 3-11 properly equips schools to deliver engaging and relevant PSHE within a whole-school approach. Jigsaw lessons also include mindfulness allowing children to advance their emotional awareness, concentration and focus.

There are six Puzzles (half-term units of work) each with six Pieces (lessons). Every year group studies the same Puzzle at the same time (sequentially ordered from September to July), allowing for whole school themes and the end of Puzzle product, for example, a display or exhibition (like the Garden of Dreams and Goals) to be shared and celebrated by the whole school. Each year group is taught one lesson per week and all lessons are delivered in an age- and stage-appropriate way so that they meet children's needs.

The Puzzles and what children learn

Being Me In My World covers a wide range of topics, including a sense of belonging, welcoming others and being part of a school community, a wider community, and a global community; it also looks at children's rights and responsibilities, working and socialising with others, and pupil voice.

Celebrating Difference focuses on similarities and differences and teaches about diversity, such as disability, racism, power, friendships, and conflict; children learn to accept everyone's right to 'difference', and most year groups explore the concept of 'normal'; bullying – what it is and what it isn't, including cyber and homophobic bullying – is an important aspect of this Puzzle.

Dreams and Goals aims to help children think about their hopes and dreams, their goals for success, what personal strengths are, and how to overcome challenges, via team work skills and tasks. There is also a focus on enterprise and fundraising. Children learn about experiencing and managing feelings of pride, ambition, disappointment, success; and they get to share their aspirations, the dreams and goals of others in different cultures/countries, and their dreams for the world.

Healthy Me covers two main areas of health: Emotional health (relaxation, being safe, friendships, mental health skills, body image, relationships with food, managing stress) and Physical health (eating a balanced diet, physical activity, rest and relaxation, keeping clean, drugs and alcohol, being safe, first aid) in order for children to learn that health is a very broad topic.

Relationships has a wide focus, looking at diverse topics such as families, friendships, pets and animals, and love and loss. A vital part of this Puzzle is about safeguarding and keeping children safe; this links to cyber safety and social networking, as well as attraction and assertiveness; children learn how to deal with conflict, their own strengths and self-esteem. They have the chance to explore roles and responsibilities in families, and look at stereotypes. All Jigsaw lessons are delivered in an age- and stage-appropriate way so that they meet children's needs.

Changing Me deals with change of many types, from growing from young to old, becoming a teenager, assertiveness, self-respect and safeguarding. Self and body image, puberty, attraction and accepting change are diverse subjects for children to explore. Each year group thinks about looking ahead, moving year groups or the transition to secondary school. Life cycles and how babies are made and grow are treated sensitively and are designed to meet children's needs. All year groups learn about how people and bodies change. This Puzzle links with the Science curriculum when teaching children about life cycles, babies and puberty.

RELATIONSHIPS AND SEX EDUCATION

Why is RSE needed?

•More than ever before, children are exposed to representations of sex and sexuality through the media/ social media and the social culture around them, so we need to present a balanced view of RSE and help them to be discerning and stay safe.

•Rates of sexually-transmitted infections (STIs) and teenage pregnancy in the UK are relatively high – as is the regret felt by young people after early sexual experiences.

•Research shows that most parents say they want the support of schools in providing RSE for their children.

•Research consistently shows that effective RSE delays first sexual experience and reduces risktaking.

•Surveys of children and young people, as well as Ofsted, have repeatedly told us that RSE tends to be "too little, too late and too biological".

What are the aims of RSE?

There are four main aims for teaching RSE within the context of Primary School PSHE (Personal, Social, Health Education):

•To enable young people to understand and respect their bodies, and be able to cope with the changes puberty brings, without fear or confusion

•To help young people develop positive and healthy relationships appropriate to their age, development etc. (respect for self and others)

•To support young people to have positive self-esteem and body image, and to understand the influences and pressures around them

•To empower them to be safe and safeguarded



The Jigsaw PSHE relationship and sex education units of work aim to give children their entitlement to information about relationships, puberty and human reproduction, appropriate to their ages and stages of development. This work is treated in a matter-of-fact and sensitive manner to allay embarrassment and fear and helps children to cope with change, including puberty and to learn about families, friendships and healthy relationships. Jigsaw aims to build the positive.

Some of the key aspects covered in the course of Key Stages 1 and Key Stage 2 are:

- Life cycles
- How babies are made
- My changing body
- Puberty
- Growing from young to old
- Becoming a teenager
- Assertiveness and self-respect
- Friendship and family life
- Safeguarding
- Family stereotypes
- Self and body image

- Attraction
- Relationship skills e.g.conflict resolution
- Accepting change
- Looking ahead
- Moving/transition to secondary school



MODERN FOREIGN LANGUAGE

From September 2014 the National Curriculum for England included languages as a statutory subject for Key Stage 2 pupils.

At Harrow Gate Primary, we use a published scheme of work to enable us to teach the children from Year 3 to Year 6 'French'.

Euro Stars New Primary French is a clear progressive language curriculum with identified resources and interactive support.

Harrow Gate Primary use Euro Stars New Primary French as a complete programme, taught progressively through year 3 -6, with activities building on previous learning and ensuring progression.

The programme consists of 24 Units spread over years 3 to 6. Each unit is designed to be taught within one half term.

	1	2	3	4	5	6	Continuous
Year 3	Moi (all about me)	Jeux et chansons (Games and songs)	On fait la fete (Celebration s)	Portraits (Portraits)	Les quatre amis (The four friends)	Ca pousse (growing things)	Les nombres 1- 20
Year 4	On y va! (All aboud!)	L'argent de poche (pocket money)	Raconte- moi une histoire (tell me a story)	Vive le sport (our sporting lives)	Le Carnaval des Animaux (The carnival of the animals)	Quel temps fait – il? (What's the weather like?)	Les nombres 21 - 100
Year 5	Bon appetite, bonne sante (Healthy eating)	Je suis le musician (I am the music man)	En route pour L'ecole (on the way to school)	Scene de plage (Beach scene)	Le retour du printemps (The return of spring)	Les planets (The planets)	L'alphabet francsis (The French alphabet)
Year 6	Notre ecole (our school)	Notre monde (the world around us)	Le passe et le present (Then and now)	Ici et la (out and about)	Monter un café (setting up a café)	Quoi de neuf? (What's in the news)	Les Nombres





COMPUTING

Enquire Learning Trust - Computing Curriculum

At The Enquire Learning Trust, we believe that it is vital for all our pupils to learn from and about Computing and Technology, so that they can understand the world around them. Through teaching our computing curriculum, we aim to equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. It is our intention to enable children to find, explore, analyse, exchange and present information as well as having the skills to manipulate, develop and interpret different forms of technology in an ever changing world. In such a fast-moving curriculum, we are constantly looking at new ways of delivering relevant and exciting activities, while still delivering the fundamental skills needed for computing.

Using technology safely and responsibly is a main priority and ensuring all are able to use the internet and equipment appropriately is of paramount importance. We encourage our pupils to make links across the curriculum, the world and our local community, to reflect on their own experiences, which are designed in our 3D curriculum, allowing horizontal and vertical links with previous year groups.

The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable participants in a digital world.

Aims

The curriculum for computing aims to ensure that all pupils:

• can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data

representation

 can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

• can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

• are responsible, competent, confident and creative users of information and communication technology.

YEAR GROUP OVERVIEW

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2
Year 1	E-safety: Using the internet safely		Digital Literacy & E- safety: using a computer/device. Typing training.		E-safety: Using the internet safely	Coding with Beebots	Digital Literacy: bug hunters		Digital Literacy: Potty painters		Coding: Scratch Jnr - introduction and fundamentals
Year 2 Topic related activities throughout the year.	E-safety: Staying safe on the internet – Jessie and Friends.		Digital Literacy & E- safety: Using search. Typing training.		E-safety: Appropriate behaviour online.	Coding: Scratch Jnr - introduction and fundamental s	Digital Literacy - using a computer. What is the Internet.	Digital Literacy: Introduction to photo editing.	E-safety: Staying safe on the internet.	Digital Literacy: taking and using photos	Coding: Scratch Jnr - introduction and fundamentals
Year 3 Topic related activities throughout the year.	E-safety: Google Share with care		Digital Literacy & E-safety: using a computer/ device.	Word processing PowerPoin t	E-safety: Trust	Digital Literacy: Social media and evaluating search results	Coding: Animations - Tynker		Coding: Loops, debugging and events.		Coding: If statements. HTML App Coding
Year 4 Topic related activities throughout the year.	E-safety: Google Don't fall for fake		Digital Literacy: Research and develop a topic		Word processing PowerPoint	Photo Editing - Paint.Net: Editing functions	Coding: Algorithms - Tynker		Digital Literacy: Stop motion animation		Coding: Conditions, Functions and App design
Year 5 Topic related activities throughout the year.	E-safety: Google Secure your secrets		Digital Literacy: Spreadsheets		E-safety: Cyberbullyin g	Coding: Scratch – Commands, Debugging	Coding: Conditional Code, While loops and Logic.		Digital Literacy: Animation through varied apps and websites	Digital Literacy: Website creation. SharePoi nt	Coding: Algorithms. Game creation
Year 6	E-safety: Google It's cool to be kind Interland's Kind Kingdom		Digital Literacy: 3D modelling using Google Sketchup.		E-safety: Why is Social Media Free? Fake News in real life.	Coding: Use variables, coding with variables	Coding: Use of types and initialisation in code, parameters and problem solving skills		Digital Literacy: Childnet video competition		Coding: The use of Arrays in coding, visualise data and coding concepts