



# 'It's a crazy world out there. Be curious'

(Stephen Hawkings)

#### **Introduction and Intent**

Our Wider World Curriculum is an interwoven connection of the traditional subjects within three themes:

- > Humanities Geography, History, Languages and Religious Education
- > Science
- > Technology Computing and Design

The curriculum is designed to be engaging, creative, explorative and informative for pupils to understand the world and to help them be prepared for the rapidly changing future. Pupils access the curriculum through timetabled lessons on a weekly basis. This work will be further enhanced by visits, whole school activities, events, celebrations and, in Key Stage 4, pupils will have the opportunity to gain AQA certification.

#### This National Curriculum states:

- A high-quality science education provides the foundations for understanding the world.
- Computing education equips pupils to use computational thinking and creativity to understand and change the world.
- Using creativity and imagination, pupils design and make products that solve real and relevant problems.
- A high-quality history education will help pupils gain a coherent knowledge and understanding.
- A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives.

Through our cross-curricular, themed learning approach, pupils can acquire a deeper, richer knowledge and understanding about our world.





### **EYFS (Nursery and Reception) Curriculum**



	AUTUMN 1	Autumn 2	SPRING 1	Spring 2	SUMMER 1	SUMMER 2		
GENERAL THEMES	ALL ABOUT ME!	CELEBRATIONS!	JACK FROST!	GROWING!	AMAZING ANIMALS!	UNDER THE SEA/OUR COLOURFUL WORLD!		
UNDERSTANDING THE WORLD	Understanding the world involves guiding children to <b>make sense of their physical world and their community</b> . The frequency and range of children's personal experiences increases their knowledge and sense of the world around them, from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.							
'It's a crazy world out there. Be curious' (Stephen Hawkings)	People, Culture and Common Describe their immediate environments and common Describe their immediate and collass.  People, Culture and Common Describe the immediate and collass.	differences between things settings, characters, and extings, characters, and extinuities wironment using knowledge differences between difference differences between life in the characters, Chinese New Year, Mother and them, making observatifferences between the national settings.	in the past and now, dra- events encountered in bo- from observation, discu- nt religious and cultural of this country and life in of ers Day, Easter, Fathers in tions and drawing pictural tural world around them		d maps. g on their experiences and odge from stories, non-fiction wing on their experiences and odge.	n texts and, when		





### Key Stage 1 (Year 1 and Year 2) Curriculum

Cycle 1 - 23/24	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Kings and Queens - Significant Individuals Elizabeth 1 - Victoria - Elizabeth 2 - Charles	Christmas Traditions - UK and other countries, including Poland - Light and sound - Tree decorating Letters to Santa/ The Role of St Nicholas - post office / box trip. The religious significance of Christmas- celebrating Jesus being born	Jurassic World  - Life cycle of animals  - Carnivores, herbivores and omnivores  - Link to living things and their habitats.  - Simple food chain.  - Habitat hunt!	Heroes  - Own Locality  - Nurses  - Doctors  - Teachers  - Role play  Heroes past and present	Minibeasts - Geographical skills and fieldwork - Features of the environment - Physical geography Geographical vocabulary Woodland link Scientific observations, classifying, data collection	My Stories  - Variety of materials Properties - Compare and group Designing items Junk modelling Manipulate materials.

Cycle 2 - 24/25	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Festivals and Ceremonies - Harvest - Diwali - Halloween - Remembrance	Festivals and Celebrations - Family traditions, including those from other countries - Local visits e.g. Church - Tree decorating - Making/sending cards The religious significance of Christmas- celebrating Jesus being born  Comparing festivals around the world- different localities	Land and Sea  - Identify, name and compare the structure of animals Identify and name plants Grow seeds and bulbs - Seasonal change Local environment study.	Toys - Change in living memory - Favourite - Old / New - Make - Stay and play Describing different materials	Farm Fun - Seasons - Weather - Physical geography.  Identify and name animals (fish, amphibians, birds, reptiles, mammals and carnivores, herbivores, omnivores) Understanding the role of collective responsibility in caring for the environment	Healthy Me - Life cycles of humans Healthy diet and exercise Name, draw and label the human body Humans and the 5 senses Zones of Emotional Regulation.

**■ KS1 WOW-In, WOW-Out and Trip Ideas** 





	KS1 - Access		KS1 - Build			
Humanities	Science	Technologies	Humanities	Science	Technologies	
1. I can follow the class routines and explore the immediate environment.  2. Explore new objects, materials and the environment.  3. Have experience of simple subject specific vocabulary.  4. Notice and respond to stimuli.  5. Show increasing awareness of cause and effect.  6. Coordinate movements to interact with objects and/or people.  7. Experience celebrations, festivals and places of worship.  8. To take part in key events such as Children In Need day and Anti-Bullying Week.  9. I can make observations about the world around me.  10. I can identify key people in my life.  11. I can identify people who can help me e.g. in school and in the community.  12. I can explore the local area beyond the classroom.  13. I can explore religious items, beliefs and festivals.	1. Show curiosity. 2. Notice and respond to stimuli; lights, sound, materials and movement. 3. To take part in sensory activities involving water, wind, light 4. Experience materials and new textures. 5. Show increasing awareness of cause and effect. 6. Express preferences. 7. Experience gathering simple data. 8. I can identify what an animal is from a choice of two things. 9. I can recognise that a skeleton is made of bones. 10. I know that animals need food to survive. 11. I can identify seasonal changes. 12. I can identify solids, liquids and gases and observe their physical changes of state e.g. a solid melting into a liquid. 13. To identify parts of the human body. 14. To explore nature and investigate animals and plants. 15. I can identify differences in fossils through sensory activities. 16. I can explore textures e.g. fur and plants.	1. Experience a range of lights, sounds and movement. 2. Engage for longer periods of time, watching/interacting with electronic devices/ lights etc. 3. Interact with a range of adults and peers. 4. Explore technology in school. 5. Have awareness of different products. 6. Respond to a range of smells, tastes, textures and materials. 7. Explore mechanisms and how things move. 8. I can categorise items by size. 9. I can explore everyday materials and how these are used in school.	1.I can follow the class routines and explore the school environment.  2. Explore their world with curiosity.  2. Notice and explore changes in locations.  3. Begin to use some subject specific vocabulary.  4. Recognise changes.  5. Notice and explore changes in events.  6. Explore periods of history and key events or people.  7. Explore and experience celebrations, festivals and places of worship.  8. I can participate in key events in school.  9. I can identify and make observations about the world around me.  10. I can identify key people in my life at home and school.  11. I can identify people who can help me in the community.  12. I can explore the local area beyond the classroom environment.  13. I can explore and name religious items, beliefs and festivals.	1. Be inquisitive and explore. 2. Explore changes to materials and/or objects. 3. Explore and respond to materials, and new textures. 4. Show increasing awareness of cause and effects linking to scientific enquiry. 5. I can express preferences and make choices. 6. Gather simple data related to the topic. 7. I can identify common animals. 8. I can recognise that some animals have skeletons and some do not. 9. I know that animals need food and water to survive. 10. I can make a healthy sandwich with support. 11. I can observe seasonal changes and changes to the weather. 12. I can identify solids, liquids and gases and identify changes of state e.g. solid to liquid. 13. I can identify and name parts of the human body. 14. I can explore nature and investigate and start to name animals and plants. 15. I can identify differences and similarities in fossils through sensory activities. 16. I can recognise how things have changed over time. 17. I can name different types of dinosaur. 18. I can say how dinosaurs are similar and different to modern reptiles. 19. I can explore differences in textures e.g. fur and plants.	1. Use technology to produce creative digital content. 2. Follow simple instructions to use technology in class. 3. Use technology safely with adult help. 4. Identify technology used in school. 5. Notice and respond to different products. 6. Explore a range of objects and materials with different textures, shapes and sizes, and weights. 7. Create objects of imagination by changing and modifying existing designs. 8. I can categorise items by size and explain why. 9. I can explore and identify everyday materials.	





	KS1 - Connect		KS1 - Deepen			
Humanities	Science	Technologies	Humanities	Science	Technologies	
1. I can explore the school and local community environment.  2. Be curious about their and the wider world.  3. Recognise different features of their environment.  4. Know some basic subject specific vocabulary.  5. Observe with interest.  6. Explore past events.  7. Know events happened at different times.  8. Begin to recognise celebrations, festivals and places of worship.  9. I can take part in key events in school related to the wider community e.g. Red Nose Day.  10. I can identify and make observations about the world around me and suggest why.  11. I can identify key people in my life at home and school and how they can help me.  12. I can identify people who can help me in the community and how e.g. police, doctors.  13. I can identify and name religious items, beliefs and festivals.	1. Ask simple questions. 2. Engage in periods of observation. 3. Interact with a range of simple materials and equipment. 4. Begin to perform simple tests. 5. Begin to identify and classify. 6. Answer simple questions. 7. Gather and record simple data related to the topic. 8. I can identify common animals and classify them into groups. 9. I can recognise that some animals have skeletons and some do not and begin to use the scientific language for this. 10. I can say why animals need food and water to survive. 11. I can make healthy meal choices. 12. I can observe changes to the weather and suggest why this is happening. 13. I can identify changes of state e.g. solid to liquid and suggest why this happens. 14. I can identify and name external and internal parts of the human body. 15. I can investigate nature and name animals and plants. 16. I can identify differences and similarities in fossils. 17. I can recognise how things have changed over time. 18. I can name different types of dinosaur and compare them. 19. I can say how dinosaurs are similar and different to modern reptiles and why. 20. I can explore differences and similarities in textures e.g. fur and plants.	1. Be aware of algorithms, begin to create and debug simple programs. 2. Understand how to create, organise, store, manipulate and retrieve digital content. 3. Use technology safely and respectfully know how to seek help when concerned about technology. 4. Identify technology used beyond school. 5. Communicate their ideas about different products. 6. Create purposeful designs with skills for shaping and finishing. 7. Explore how designs can be improved e.g. bigger, stronger. 8. I can categorise items in different ways and explain why. 9. I can identify and discuss the uses of everyday materials.	1. I can explore the school and local community environment with increasing independence.  2 Develop knowledge about the world including the UK and locality knowledge.  3. Study key human and physical features of their environment.  4. Understand basic subject specific vocabulary.  5. Begin to use geographical skills and observation.  6. Develop an awareness of the past.  7. Demonstrate an awareness of chronological order.  8. Recognise celebrations, festivals and places of worship.  9. I can take an active role in celebrating key events in school related to the wider community e.g. Red Nose Day.  10. I can identify and make observations about the world around me and suggest why things happen.  11. I can identify key people in my life at home and school and how they can help me.  12. I can identify people who can help me in the community and how e.g. police, doctors.  13. I can identify and name religious items, beliefs and festivals.	1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely. 3. Use simple equipment. 4. Perform simple tests. 5. Identify and classify. 6. Use their observations and ideas to suggest answers to questions. 7. Gather and record data to help in answering questions related to the topic. 8. I can identify common animals and classify them into groups, such as herbivore, carnivore and omnivore. 9. I can recognise that some animals have skeletons and some do not and begin to use the scientific language for this. 10. I can suggest adaptations that animals have to survive. 11. I can make healthy meal choices in school and in the community e.g. at the local shops. 12. I can observe changes to the weather and discuss the impact of climate change. 13. I can identify changes of state e.g. solid to liquid, including reversible and irreversible reactions. 14. I can identify and name external and internal parts of the human body and what they do. 15. I can investigate nature and name animals and plants with increasing accuracy. 16. I can identify differences and similarities in fossils and explain my findings. 17. I can recognise how things have changed over time and how they were different in the past versus the modern day. 18. I can name different types of dinosaur and compare them to each other. 19. I can say how dinosaurs are similar and different to modern reptiles and suggest why.	1. Understand what algorithms are, create and debug simple programs.  2. Create, organise, store, manipulate and retrieve digital content.  3. Demonstrate using technology safely and respectfully, and identify what to do when concerned about technology.  4. Recognise how technology can be used beyond school.  5. Design products based on criteria.  6. Select and use a range of materials, tools, equipment to create functioning, appealing designs.  7. Evaluate their designs.  8. I can categorise items in different ways and explain why.  9. I can identify and analyse the uses of everyday materials.	





### Key Stage 2 (Year 3, Year 4, Year 5 and Year 6) Curriculum

Cycle 1 - 23/24	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Explorers  - Columbus and Matthew Henson and changes for the indigenous people living in those countries, particularly in religious beliefs  - Animals including humans	Christian Christmas - Christmas Story - Explore how Christmas has changed through the ages - Light	Perfect Plants - Functions of plant parts Water transportation Life-cycle.	Transport - First flight - Old/New - Future transport e.g. electric cars Scientific investigations and forces and friction	British Isles - The 4 UK countries Capitals - Seas- habitats/ environmental impact - Comparing Localities	I've Got the Power!  - Forces and magnets.  - Attract, repel, poles.  - Gravity

Cycle 2 - 24/25	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Cities - Great Fire Slavery and the anti slavery movement - Flammable and inflammable materials	Celebration - Hanukkah and Christmas - Judaism - Story - Food - Electricity- appliances, conductors and insulators, making simple circuits - Light and shadows	Inside My Body - Skeleton and muscles Digestion, circulation Healthy eating - Aging, lifestyle, the use of drugs as medicine and how to take it safely	Superpowers  - Own Locality-making observations and collecting data  - Mother Shipton  - Earth and Space-science through time	Animals - Living things and their Habitats - Omnivores, herbivores and carnivores - Skeletons	Let's Go to the Beach -Coast lines UK/abroad and erosion, including safety near the sea Rocks, fossils States of matter.

Cycle 3- 25/26	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	The Stone Age	Celebration -	Living Things	The Victorians		Charge it Up!





Cycle 4 - 26/27	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Ancient Egypt - Who were they? -Pharaohs/Pyramids -Farming - Mummification - Testing the best material for protection from the climate	Celebration - Diwali - Hinduism - Story - Festival of lights Electricity and electrical circuits - how do we make bulbs brighter-Scientific investigation	Evolution and Inheritance  - Growth, young to old Off-spring, adaptation.	Medieval Britain - Heritage - Knights - Knaresborough Castle, local history - Battle of Hastings	Around the World - 7 continents/5 oceans Maps, atlas, compass Aerial photographs - Forces	Earth and Space - Planets - Earth, sun, moon Day and night.

### **■ KS2 WOW-In, WOW-Out and Trip Ideas**

KS2 - Access			KS2 - Build			
Humanities	Science	Technologies	Humanities	Science	Technologies	
1. I can follow the class routines and explore the immediate environment.     2. I can begin to explore making choices and keeping safe.     3. Explore their world with curiosity.     4. Notice and explore	Explore changes to materials and/or objects.     Explore a range of materials and equipment.     Be observant.     Be encouraged to gather simple data.     Watch how data can be recorded.	Show interest in technology.     Follow simple instructions to begin to use technology in class.     Use technology safely with adult help.     Identify technology used in school.	1. I can follow the class routines and explore and identify areas of the school environment.     1. Be curious about their and the wider world.     2. Explore changes in environment and landscapes.     3. Know some basic subject specific vocabulary.	1. Ask simple questions and wait for answers.     2. Interact with a range of simple materials and equipment.     3. Engage in longer periods of observation.     4. Begin to gather and record simple data.     5. Experience data being recorded.	Create simple programs and algorithms.     Use technology to produce creative digital content on multiple platforms.     Use technology safely and respectfully,	





- changes in locations.
  5. Begin to recognise some subject specific vocabulary.
- 6. Begin to recognise changes.
- 7. Notice and explore changes in events.
- 8. Explore periods of history and key events or people.
- 9. Explore and experience celebrations, festivals and places of worship.
- 10. I will begin to explore a range of foods and food textures/states e.g. solids and liquids.
- 11. I can take part in key events in school related to the wider community e.g. Red Nose Day and Bonfire Night.
- 12. I can demonstrate kind actions towards others.
- 13. I can identify key people in my life at home and school and how they can help me.
- 14. I can identify people who can help me in the community and how e.g. police, doctors.
- 15. I can explore religious items, beliefs and festivals.
- 16. To understand the difference between past and present.
- 17. I can sequence key points in the day.18. I can follow
- 18. I can follow instructions such as forwards and backwards.

- 6. Investigate changes to materials and/or objects
- 7. Recognise differences, similarities or changes related to simple scientific ideas and processes.
- 8. I can identify common animals and their offspring. 9. I can identify the key features of an animal.
- 10. I can recognise that some animals have bones.
- 11. I know that animals need food and water to survive.
- 12. I can observe animals in their habitats, in school and beyond.
- 13. I can explore different types of rocks.
- 14. I can explore soil using my senses.
- 15. I can explore different flowers and plants.
- 16. I can explore states of matter and how they can be separated e.g. how to separate two solids from one another.
- 17. I can explore changes to states of matter e.g. a solid turning into a liquid.
- 18. I can investigate the uses for materials when they have changed state e.g. what can solid water (ice) be used for.
- 19. I can take part in animal care and plant care.
- 20. I can observe the weather and use topic vocabulary e.g. night and day.
- 21. I can identify my teeth.
  22. I can make observations about space, planets and stars.

- 5. Notice and respond to different products.
- Explore a range of objects and materials with different textures, shapes and sizes, and weights.
- Attempt to create objects of imagination by changing and modifying existing designs.
- 8. I can explore with magnets.
- 9. I can make patterns using multi-media e.g. I can make a fossil using salt dough.
- 10. I can explore the effectiveness of materials against water.
- 11. I can explore sounds and lights.
- 12. To explore how light is affected in a circuit e.g. how to turn the light on and off.
  13. To explore the use of electrical items in the home/school through role play and provision areas.
- 14. I can explore resistance in forces.
- 15. I can observe objects sinking or floating in water.

- 4. Observe with interest.
- 5. Notice and explore changes in living memory and then beyond.6. Know events happened at different times.
- 7.Begin to recognise celebrations, festivals and places of worship.
- 8. I will explore a range of foods and food textures/states e.g. solids and liquids.
- 9. I can participate in key events in school related to the wider community e.g. Red Nose Day and Bonfire Night.
- 10. I can demonstrate kind actions towards others and why this is important.
- 11. I can suggest ways to stay safe and why this is important.
- 12. I can compare rules e.g. the rules in the classroom, the 5 pillars of Islam, the 5 Ks in Sikhism.
- 13. I can suggest ways that care is shown in different religions.
- 14. I can identify key people in my life at home and school and how they can help me.
- 15. I can identify people who can help me in the community and how e.g. police, doctors.
- 16. I can identify and name religious items, beliefs and festivals.
- 17. To explain the difference between past and present.
- 18. I can sequence key points in the day and use topic vocabulary. 19. I can follow instructions such as forwards and backwards, left and right.
- 20. I identify North, South, East and West on a compass.
- 21. I can begin to use a map.
- 22. I can identify that England is one of four countries in the United Kingdom.
- 23. I can suggest ways to look

- in a variety of ways including drawings and diagrams.
- 6. Identify cause and effects linking to scientific enquiry.
- 7. Use straightforward scientific evidence to answer questions or to support their findings.
- 8. I can identify and name common animals and their offspring.
- 9. I can start to explore micro-habitats.
- 10. I can use the vocabulary carnivore, herbivore and omnivore.11. I can compare animals and their key features.
- 12. I can take part in animal care and plant care.
- 13. I can recognise that some animals have bones and some do not.
- 14. I know that animals need food and water to survive, and suggest why.
- 15. I can identify sources of food and construct a simple food chain.16. I can explore how different objects move on different surfaces.
- objects move on different surfaces.

  17. I can compare different types of rocks
- 18. I can explore differences in soil types and the parts of the soil.
- 19. I can explore wild and garden flowers and plants.
- 20. I can label the parts of a plant and their functions.
- 21. I can describe the life cycle of a plant.
- 22. I explore the properties of different materials.
- 23. To understand how a gas is formed
- 24. I can explore states of matter and how they can be separated and changed.
- 25. I can suggest which materials would dissolve in water, which would float and which would sink.

- and know how to seek help when concerned about technology.
- 4. Identify technology used beyond school.5. Communicate their ideas about different

products.

- 6. Explore and choose from a range of objects and materials with different textures, shapes, sizes, and weights.
- 7. Explore how designs can be improved e.g. bigger, stronger.
- 8. I can observe magnets being used to attract and repel objects.
- 9. I can make predictions about magnetic materials.
- 10. I can make patterns using multi-media and explain how I did this e.g. I can make a fossil using salt dough.
- 11. I can explore the effectiveness of materials against water and how I could make this better.
- 12. I can explore sounds and lights, including shadows and reflections.
- 13. I can explore how to change the pitch of sounds.
- 14. To explore how light is affected in a circuit e.g. how to turn the light on and off, and how to make it brighter.
- 15. To explore the use





individuals in history.
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	KS2 - Connect		KS2 - Deepen			
Humanities	Science	Technologies	Humanities	Science	Technologies	
1. I can explore and identify areas of the school and local community environment.  1. Develop knowledge about the world including the UK and locality knowledge.  2. Explore changes in climate, environment and landscapes.  3. Understand basic subject specific vocabulary.  4. Develop fieldwork and observational skills.  5. Explore periods of history, key events and people.  6. Demonstrate an awareness of chronological order.  7. Recognise celebrations, festivals and places of worship.  8. I can develop a timeline of key events in history e.g.  Bonfire Night/Guy Fawkes.	1. Ask relevant questions and use different types of scientific enquiries to answer them. 2. Set up simple practical experiments. 3. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 4. Gather, record, classify and present data in a variety of ways. 5. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. 6. Use results to draw simple conclusions, make predictions for new values, suggest improvements	1. Understand what algorithms are, create and debug simple programs. 2. Follow instructions to use technology in class to create, organise, store, manipulate and retrieve digital content. 3. Use technology safely and respectfully, keeping personal information private. 4. Recognise how technology can be used beyond school. 5. Design objects by changing and	1. I can explore and identify areas of the school and local community environment with increasing independence. 1. Demonstrate World and UK locational knowledge. 2. Understand human and physical geography similarities and differences. 3. Use basic geographical vocabulary to describe human and physical features. 4. Carryout simple fieldwork and observational skills in their surrounding environment. 5. Explore changes in living memory and beyond suggesting reasons why. 6. Know where people/events fit chronologically.	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.     Set up simple practical enquiries, comparative and fair tests.     Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate     Gather, record, classify and present data in a variety of ways to help in answering questions.     Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs     Use test results to make predictions to set up further comparative and fair	1. Explain how algorithms work and detect and correct errors in simple algorithms. 2. Design, write and debug programmes for specific goals, using sequences, selection and repetition. 3. Understand, use and search the internet safely to collect, analyse, evaluate and present data using a variety of software. 4. Know how computer networks e.g. the internet, can provide multiple services and the opportunities they offer for communication and collaboration. 5. Research design ideas	





- 9. I can actively participate in key events in school related to the wider community e.g. Red Nose Day and Bonfire Night.
  10. I will explore a range of foods and food textures/states e.g. solids and liquids and make predictions about them.
- 11. I can demonstrate kind and appropriate actions towards others and suggest why this is important.
- 12. I can give reasons for changes over time.
- 13. I can suggest ways to stay safe in school and in the community and why this is important.
- 14. I can compare rules e.g. the rules in the classroom, the 5 pillars of Islam, the 5 Ks in Sikhism and suggest why they are important.
- 15. I can suggest ways that care is shown in different religions and why.
- 16. I can identify key people in my life at home and school and how they can help me.
- 17. I can identify people who can help me in the community and how e.g. police, doctors.
- 18. I can identify and name religious items, beliefs and festivals.
- 19. I can compare celebrations.20. To use maps and photographs to compare
- features of the United Kingdom. 21. Compare the past and the present.
- 22. I can sequence key points in the day and use topic vocabulary.
- 23. I can begin to follow instructions using a compass.
  24. I identify North, South, East

- and raise further questions.
- 7. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- 8. I can identify the role of the skeleton in humans and other animals.
- 9. I can explain how fossils have formed over time.
- 10. I can compare different types of rocks and use scientific language.11. I can explore differences in soil types and identify the parts of the soil.
- 12. I can make predictions about the local wildlife and record my findings.
- 13. I can identify different habitats around the world.
- 14. I can begin to classify insects.
- 15. I can ask relevant scientific questions and collect data.
- 16. I can apply my scientificknowledge to a range of materials.17. I can evaluate designs against
- set criteria.

  18. I can identify and name common animals and their offspring, and categorise them e.g. mammals.
- 19. I can explore micro-habitats.
- 20. I can use the vocabulary carnivore, herbivore and omnivore.
  21. I can take part in animal care
- and plant care.

  22. I can label the parts of a plant
- and their functions.

  23. I can understand the role of the digestive system in the human body.
- 24. I can recognise that some animals have bones and some do not and use the scientific vocabulary for this.
- 25. I can identify what animals

- modifying existing designs.
- 6. Create purposeful designs with skills for good accuracy of shaping and finishing.
- 7. Evaluate their designs.
- 8. I can observe magnets being used to attract and repel objects even from a distance.
- 9. I can predict whether a magnet will attract or repel an object.
- 10. I can explain that magnets have two poles.
- 11. I can suggest how to strengthen and reinforce a structure.12. I can choose
- appropriate materials to create a micro-habitat e.g. bug hotel.
- 13. I can make predictions about conductors of electricity.

  14. I can plan an
- 14. I can plan an investigation and collect data.15. I can explore
- sounds and lights, including shadows and reflections.

  16. To explore how
- 16. To explore how light and sound is affected in a circuit.
  17. To explain how to safely use electrical

items in the home

- 7. Being to identify differences in celebrations, festivals and places of worship.
- 8. I can actively participate in and plan key events in school related to the wider community e.g. Red Nose Day and Bonfire Night.
  9. I can demonstrate kind and
- appropriate actions towards others and explain why this is important.
- 10. I can give reasons for changes over time and explain my suggestions.
- 11. I can explain ways to stay safe in school and in the community and why this is important.
- 12. I can compare rules e.g. the rules in the classroom, the 5 pillars of Islam, the 5 Ks in Sikhism and explain why they are important.
- 13. I can explain ways that care is shown in different religions and why.
- 14. I can identify key people in my life at home and school and how they can help me.
  15. I can identify people who
- can help me in the community and how e.g. police, doctors and explain what they do.
- 16. I can identify and name religious items, beliefs and festivals.
- 17. To use maps and photographs to compare features of the United Kingdom.
- 18. I can compare the past and the present.
- 19. I can sequence key points in the day and use topic

#### tests.

- 7. Report and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.

  8. I can identify the role of the skeleton
- 8. I can identify the role of the skeleton in humans and other animals, and identify individual bones.
- I can explain how fossils have formed over time and suggest why.
   I can compare different types of rocks and use scientific language to identify them.
- 11. I can explore differences in soil types and identify the different parts of the soil.
- 12. I can make predictions about the local wildlife, collect and record my findings.
- 13. I can identify different habitats around the world.
- 14. I can classify insects.
- 15. I can ask relevant scientific questions and collect data independently.
- 16. I can apply my scientific knowledge to a range of materials.
- 17. I can evaluate designs against set criteria.
- 18. I can identify and name common animals and their offspring, and categorise them e.g. mammals, amphibians etc.
- 19. I can explore micro-habitats and their wildlife and animals.
- 20. I can take part in animal care and plant care.
- 21. I can label the parts of a plant and explain their functions.
- 22. I can understand and explain the role of the digestive system in the human body.
- 23. I can identify vertebrates and invertebrates.

- and analyse a range of existing products.
  6. Choose materials, components,tools and equipment according to their functional properties and aesthetic qualities.
  7.Evaluate their own product against their design ideas.
- 8. I can observe magnets being used to attract and repel objects.
- 9. I can predict whether a magnet will attract or repel an object or another magnet.
- 10. I can explain that magnets have two poles and identify them.
- 11. I can evaluate my built structures and suggest how to strengthen and reinforce them.
- 12. I can choose appropriate materials to create a micro-habitat e.g. bug hotel and explain why I have chosen these.
- 13. I can make predictions about which materials will be conductors of electricity or not.
- 14. I can plan an investigation and collect data with increasing independence.
- 15. I can explore sounds and lights, including shadows and reflections.16. To explore how light and sound is affected in a

circuit.

17. To explain how to safely use electrical items in the home and at school.

18. I can explore air





and West on a compass.

25. I can use a map to identify locations in the United KIngdom.

26. I can suggest ways to look after our human and physical features of the landscape and why this is important.

27. To suggest what makes someone a good leader.
28. To compare and contrast

two locations.

29. I can identify some of the key religious festivals and when they are celebrated in the year.
30. I can suggest what I can do to help climate change e.g. recycling, public transport.
31. I can identify significant individuals in history and their achievements.

need to survive.

26. I can suggest how the eyes and ears work.

27. I can suggest how breaking the food chain could affect living things.

28. I can describe how food and water travels through the human body.

29. I can identify stages of the water cycle e.g. condensing.
30. I can identify solids, liquids and gases, filtering, evaporating and sieving.

31. I can explore states of matter and how they can be separated and changed.

32. I can identify reversible and irreversible changes.

33. I can complete a fair test.

34. I can plan my own investigation.

35. I can explain the purpose of each part of a given plant.
36. I can identify the different planets and make observations about space and the Earth's rotation.

37. To recognise that space travel has developed over time.

and at school.

18. I can investigate conductors of electricity.

19. I can explore air resistance and water resistance.

20. I can select appropriate materials to create a design e.g. to create a boat to float on water, and explain why they work.

vocabulary.

20. I can follow instructions using a compass.

21. I identify eight compass directions.

22. I can use a map to identify locations in the United KIngdom and beyond. 23. I can identify ways to look after our human and physical features of the landscape and explain why this is important. 24. To suggest what makes someone a good leader and why.

25. To compare and contrast two or more locations.

26. I can identify some of the key religious festivals and when they are celebrated in the year.

27. I can suggest what I can do to help climate change e.g. recycling, public transport, and why this is important.

28. I can identify significant individuals in history and their achievements, and how they achieved them.

24. I can explain how the eyes and ears work.

25. I can explain how breaking the food chain could affect living things.26. I can describe how food and water travels through the bodies of humans and animals.

27. I can identify stages of the water cycle e.g. condensing and evaporation.

28. I can identify solids, liquids and gases, filtering, evaporating and sieving.

29. I can identify states of matter and analyse how they can be separated and changed.

30. I can identify reversible and irreversible changes.

31. I can complete a fair test.

32. I can plan and carry out my own investigation.

33. I can identify the different planets and make observations about space and the Earth's rotation.

34. To recognise that space travel has developed over time and explain how.

resistance and water resistance and discuss my findings.

19. I can select appropriate materials to create a design e.g. to create a boat to float on water, and explain why they work.





### Key Stage 3 (Year 7, Year 8 and Year 9) Curriculum

Cycle 1 - 23/24	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	The Rotten Romans - UK (class) invasion Roman inventions e.g. roads, bath houses Soldiers, Boudicca - Hadrien's wall. Forces (NOT VOLCANOES)	World at War  - The First WW - causes of the war and life in the trenches  - Second WW - causes and life at home during the war  - Remembrance Day	Circle of Life - Photosynthesis, simple explanation Gas exchange - Cellular respiration Ecosystem - Plant reproduction.	Asia - Human geography - China / India / Russia, major cities Languages, food RE, Buddhism and Sikhism - Clean air and how to protect the environment.	Europe - Physical geography - Volcanoes - Rocks - Mount Vesuvius - Mount Etna - Languages, food RE, Christianity.	Reach for the Stars! - Nature of matter Atoms, elements, compoundsExo / endothermicPhysical changesParticle model.
Cycle 2 - 24/25	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	The Groovy Greeks - Gods and Goddesses - Medicines - Olympics - Navigation, 8 point compasses, grid references	Antarctica - Physical geography - Climate - Climate change Hemispheres - History - Ernest Shackleton	Energising - Energy waves, ultrasound Energy change transfer Renewable energies - Energy in matter, temp RE, Judaism.	Tudor Britain  - Church  - Tudors  - King Henry VIII  - Dissolution of the monasteries  - Fountains Abbey	South America - Human-geography - Contrasting Localities The Pacific Ocean The Aztecs - Earthquakes - Langages, food.	Earth and the Atmosphere - Earth, tilt, gravity force and between sun/moon; - Space scientist Dr. Maggie Anderin-Pocock - Pressure in fluids, floating sinking Materials, layers Pure and impure substances.
Cycle 3 - 25/26	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	The Vicious Vikings - Boats - Settlements - Sketch maps/plans	Australia - Great Barrier Reefenvironmental impact - Tourism - The Aboriginal Australians - Christmas in Australia	All About Us!  - Cells  - Skeleton  - Nutrition, digestion, health, drugs the effects of legal and illegal drugs on the body- how they	The Empire - Colonisation, trade and settlement- historical and current beliefs about the British Empire - Slave trade Commonwealth and	Africa - Physical/ human geography of African countries- differences and similarities - Deserts e.g. Sahara - Water cycle.	Movement and Momentum - Motion/relative, forces/Newton - Speed = distance/time and how this affects journeys





- Place knowledge. - Trade links. - Motion and forces <mark>i</mark> n waves	work - Reproduction - DNA - RE, Hinduism	their involvement in the wars including Mary Seacole and Florence NightingaleElectricity and electromagnetism-	- Languages, food. - RE, Islam.	
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## **■ KS3 WOW-In, WOW-Out and Trip Ideas**

	KS3 - Access			KS3 - Build	
Humanities	Science	Technologies	Humanities	Science	Technologies
1. Be curious about their and the wider world. 2. Explore changes in environment and landscapes and ways to look after our world. 3. Know some basic subject specific vocabulary. 4. Observe with interest. 5. Notice and explore changes in living memory and then beyond. 6. Know events happened at different times. 7. Begin to recognise celebrations, festivals and places of worship. 8. I can understand that religion is important to people. 9. I can understand how religions are celebrated. 10. I can identify important religious artefacts. 11. I can compare landscapes e.g. the coastline versus woodland. 12. I can give my opinion e.g. likes and dislikes. 13. I can explore symbols for landscape features on a map.	1. Explore a range of materials and equipment. 2. Demonstrate an awareness of risk. 3. Investigate changes. 4. Experience experiments with awe and wonder. 5. Begin to engage in observation. 6. Explore ways to measure. 7. Respond to outcomes of experiments. 8. I can explore what fossil fuel is. 9. I can use wind and water in sensory activities. 10. I can make water clean through filtering it during play. 11. I can explore the Solar System e.g. observe the stars. 12. I can suggest what to take to the moon. 13. I can observe simple scientific experiments and reactions e.g. dissolving. 14. I can observe physical changes to the state of matter e.g. melting and freezing. 15. I can name parts of the human body, including the penis and vagina. 16. I can identify the petals and leaves of plants and flowers. 17. I can explore the different foods	1. Engage with simple programs and algorithms. 2. Show interest in a variety of technology platforms to produce digital content. 3. Use technology safely and respectfully. 4. Identify technology used in school. 5. Communicate their preferences about different products. 6. Explore a wide range of objects and materials with different textures, shapes, sizes and weights. 7. Explore how designs can be improved e.g. bigger, stronger. 8. I can use fine motor skills to separate items by size. 9. I can identify sounds. 10. I can identify lights. 11. I can compare sounds made by different objects. 12. I can explore how magnets work. 13. I can use magnets to	1. Develop knowledge about the world including the UK and locality knowledge. 2. Explore changes in climate, environment and landscapes and how to look after our world. 3. Understand basic subject specific vocabulary. 4. Explore the idea of evidence shown in sources and what we can learn from them. 5. Explore periods of history, key events and people in living memory and beyond. 6. Explore historical sources and suggest what they show. 7. Recognise celebrations, festivals and places of worship. 8. I can suggest what religion is. 9. I can understand that religion is important to people and suggest why. 10. I can name religions. 11. I can suggest how religions are celebrated. 12. I will respect the opinions	1. Explore materials and equipment suggesting purpose or properties. 2. Recognise risk. 3. Predict and investigate changes. 4. Carry out experiments to test predictions. 5. Engage in longer periods of different types of observation. 6. Begin to take measurements. 7. Identify cause and effects linking to scientific enquiry. 8. I can identify the rules for working safely with scientific equipment. 9. I can explore why carbon is important. 10. I can explore the carbon cycle. 12. I can identify some of the main rock types. 13. I can explain the importance of recycling for Earth's resources. 14. I can identify the Sun as a star. 15. I can discuss the composition of the Earth's atmosphere and how gravity acts on planets/moons. 16. I can explain the seasons and seasonal changes e.g. daylight hours. 17. I can observe and participate in simple scientific experiments and reactions e.g. dissolving.	1. Explore algorithms and how to problem-solve using digital programmes. 2. Start to use data structures to carry out simple operations and create digital content. 3. Use technology and digital media creatively, safely and respectfully, keeping personal information private. 4. Identify technology used both in school and beyond school and what these may look like. 5. Develop an understanding of how the design of an object helps the user. 6. Create purposeful designs with skills for good accuracy of shaping and finishing. 7. Evaluate their designs. 8. I can understand that sound is caused by vibrations. 9. I can explore how light and sound travel.





- 14. I can explore the impact of weathering and erosion.
- 15. I can understand that landscapes in different parts of the world are different.
- 16. I can understand the terms old and new.
- 17. I can identify old and modern buildings.
- 18. I can sequence events.
- 19. I can understand who a refugee is.
- 20. I can explore how to celebrate life/loved ones.
- 21. I can identify which clothing to wear for the weather and seasons.
- 22. I can take responsibility for a classroom task/role.
- 23. I can take responsibility for my own belongings.
- 24. I will start to develop an understanding of what happened in World War One and Two.
- 25. I will explore different ceremonies.
- 26. I can describe the difference between right and wrong.
- 27. I can explore listening to music.

that make a healthy diet.

- 18. I can observe models e.g. how food is digested in the human body.
- 19. I can make a prediction.
- 20. I can test a prediction.
- 21. I can share my findings.
- 22. I can explore forces.
- 23. I can identify characteristics e.g. eye colour and hair colour.
- 24. I can identify different animals.
- 25. I can observe movement of the human body including breathing.
- 26. I can explore the human skeleton and start to identify some bones.
- 27. I can notice that bones and muscles are different.
- 28. I can observe speed and how this can differ between different modes of transport.
- 29. I can explore forces acting on everyday objects e.g. push and pull. 30. I can identify changes in states of substances e.g. melting and freezing. 31. I can identify solids, liquids and gases.
- 32. I can identify seeds in plants.
- 33. I can identify insects.

find magnetic materials.

- 14. I can describe materials as soft and hard, flexible and solid.
- 15. I can sort materials into groups.
- 16. I can start to use names for materials in their groups e.g. metals, plastics.
- 17. I can choose materials for building and construction activities.

of others.

- 13. I understand that not every person will follow a religion.
- 14. I can identify important religious artefacts.
- 15. I can identify human and physical features of my local landscape.
- 16. I can explain my opinion e.g. likes and dislikes.
- 17. I can use a map with symbols.
- 18. I can name the continents.
- 19. I can identify deserts.20. I can find countries on a World map.
- 21. I can explore the impact of weathering and erosion.
  22. I can use the terms old and new to discuss history.
  23. I can identify old and modern buildings and artefacts.
- 24. I can sequence events and explain why.
- 25. I can explain who a refugee is.
- 26. I can explore how to celebrate life/loved ones.
- 27. I can discuss rituals and celebrations of life associated with death.28. I can discuss feelings
- associated with grief.
  29. To explore how the climate has changed over time.
- 30. To explore human's impact on the climate and landscape.
- 31. To explore responsibilities throughout the stages of a human's life e.g. what a baby/child/adult can do.

- 18. I can observe and participate in physical changes to the state of matter e.g. melting and freezing.
- 19. I can discuss pure and impure substances and filtering.
- 20. I can investigate physical changes to substances.
- 21. I can observe chemical reactions and chemical changes.
- 22. I can take safety precautions around scientific experiments.
- 23. I can predict if a substance is an acid or an alkali.
- 24. I can name parts of the human body, including the penis and vagina. 25. I can discuss reproduction in humans, and understand the functions of male and female reproductive systems.
- 26. I can explain what the menstrual cycle is.
- 27. I can discuss plant reproduction.
- 28. I can say what photosynthesis is.
- 29. I can explain how a healthy diet is digested in the human body.
- 30. I can explore the role of bacteria.
- 31. I can discuss the consequences of an unbalanced diet.
- 32. I can explain the impact of smoking, exercise etc.
- 33. I can label parts of the human body.
- 34. I can give examples of forces.
- 35. I can explore balanced and unbalanced forces.
- 36. I can explain that living things are made of cells and say where DNA is located in a cell.
- 37. I can use a microscope.
- 38. I can identify traits in organisms.
- 39. I can understand the role of adaptation in survival.
- 40. I can explore what evolution means and identify fossils.
- 41. I can identify the features of living organisms.
- 42. I can understand what a skeleton

- 10. I can explore reflection and refraction.
- 11. I can explore what a magnetic force is.
- 12. I can use a magnet to identify a magnetic material and explore how magnets work.
- 13. I can explore magnetism with compasses to find direction on Earth.
  14. I can make an electrical
- 15. I can sort materials into groups e.g. magnetic and non-magnetic.

circuit with diagrams.





	32. To begin to use primary and secondary sources in my work or research.  33. I will develop an understanding of what happened in World War One and Two.  34. I will explore and describe different ceremonies.  35. I can describe the difference between right and wrong.  36. I can explore the importance of music in different cultures and religions.  is for.  43. I can explain the functions of teeth.  44. I can explain how speed can affect the time of a journey.  45. I can explain the spacing of particles in solids, liquids and gases.  46. I will know what an atom, an element and a compound are.  47. I will explore how energy can be transferred from one object to another.  48. I can explore what pressure is on an object.  49. I can explain the functions of teeth.  44. I can explain the functions of teeth.  44. I can explain the spacing of particles in solids, liquids and gases.  46. I will know what an atom, an element and a compound are.  47. I will explore how energy can be transferred from one object to another.  48. I can explain the functions of teeth.
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	KS3 - Connect			KS3 - Deepen	
Humanities	Science	Technologies	Humanities	Science	Technologies
Compare areas of the UK with similar areas of non-European countries e.g. tourism, transport.     Develop knowledge of changes in climate, environment and landscapes.     Use basic geographical vocabulary to describe human and physical features.     Carryout simple fieldwork and observational skills in their surrounding environment.     Identify possible reasons for historical events and their consequences.     Know where artefacts/people/events fit chronologically.	1. Understand that scientific methods and theories develop. 2. Consider risk. 3. Ask questions to make informed predictions. 4. Plan and carry out the most appropriate types of scientific enquiries to test predictions with safety. 5. Make systematic and careful observations, recording their findings. 6. Take accurate measurements using standard units where appropriate. 7. Calculate and present their results in relation to predictions. 8. I can explain why carbon is important and where it can be found. 9. I can explain how carbon can impact the environment.	1. Understand algorithms and use reasoning to solve problems and predict the behaviour of simple programmes. 2. Use data structures to program, carry out and use simple operations. 3. Understand how the hardware and software components of a computer work. 4. Know how computer networks e.g. the internet, can provide multiple services and	1. Deepen their understanding of the world and their locality. 2. Begin to understand the links between human and physical geography. 3. Develop human and physical geography vocabulary, skills and knowledge. 4. Carryout fieldwork and observational skills in the wider environment. 5. Develop knowledge of periods of history, key events and people in living memory and	1. Understand that scientific methods and theories develop, objectively. 2. Evaluate risk. 3. Ask questions to develop a line of enquiry and make predictions using scientific knowledge and understanding. 4. Select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables safely. 5. Make and record observations and measurements using a range of methods for different investigations; and evaluate the reliability of methods and suggest possible improvements. 6. Carry out appropriate calculations and undertake basic data analysis.	Understand algorithms and use logical reasoning to solve real-world problems.     Make appropriate use of data structures and programming languages to carry out simple operations.     Understand the hardware and software components of a computer and how they work, including how instructions are stored and executed within a digital system.     Use digital media safely and creatively, including re-using, revising and repurposing digital artefacts





- 7. Being to identify differences in celebrations, festivals and places of worship.
- 8. I can explain what religion means.
- 9. I can explain how religion is important to people and suggest why.
- 10. I can name religions and suggest how religions are celebrated.
- 11. I will respect the opinions of others.
- 12. I understand that not every person will follow a religion.
- 13. I can identify important religious artefacts and what they could be used for.
- 14. I can identify human and physical features on a World map.15. I can use a map with symbols
- and identify their meaning.

  16. I can name the continents and
- find countries on a World map.

  17. I can identify deserts and oceans.
- 18. I can interpret maps e.g. Ordnance Survey Maps.
- 19. I can explore and discuss the impact of weathering and erosion. 20. I can use the terms old and new to discuss history.
- 21. I can discuss the impacts that history has on the modern day.
- 22. I can discuss topics such as the dissolution of the monasteries and what happened.
- 23. I can sequence events and explain why.
- 24. I will explore cultural, social and technological changes in history.
- 25. I can suggest how religion supports people.
- 26. I can discuss rituals and celebrations of life associated with death.

- 10. I can explain the rules for working safely with scientific equipment.
- 11. I can explain what fossil fuels are and what they are used for.
- 12. I can identify stages of the carbon cycle.
- 13. I can use words such as respiration and combustion to describe reactions.
- 14. I can name the three main rock types and discuss the rock cycle.
- 15. I can explain the importance of recycling for Earth's limited resources.16. I can explain how gravity works on different planets.
- 17. I can explain the composition of the Earth's atmosphere.
- 18. I can explain how carbon use damages the environment.
- 19. I can explain what "soluble" is and how filtration works.
- 20. I can use scientific processes to separate mixtures.
- 21. I can observe and participate in chemical reactions and chemical changes.
- 22. I can use the correct scientific terminology.
- 23. I can explore physical and chemical changes.
- 24. I can take safety precautions around scientific experiments and explain why I need to do this.
- 25. I can give real life examples of scientific reactions.
- 26. I can use indicators to infer information e.g. whether a substance is acidic, alkaline or neutral.
- 27. I can use the pH scale.
- 28. I can understand how human lifestyle can impact a human foetus.
- 29. I can name and label parts of the human body, including the penis and vagina
- 30. I can discuss reproduction in humans, and understand the functions of male and female reproductive systems.
- 31. I can explain the importance of

- the opportunities they offer for communication and
- collaboration.
  5. Research design ideas and analyse a range of existing products.
- 6. Choose materials, components,tools and equipment according to their functional properties and aesthetic qualities.
- 7. Evaluate their own product against their design ideas.
- 8. I can explain that sound is caused by vibrations.
- 9. I can explore changes in sound and light, including natural light and man-made light.
- 10. I can explore how light and sound travel.
  11. I can explain what reflection and
- refraction are.
  12. I can explain how magnets can be used in real life situations.
  13. I can explore
- magnetism with compasses to find direction on Earth. 14. I can make an electrical circuit with
- diagrams and explain how they work. 15. I can sort materials into different groups e.g. magnetic and

non-magnetic.

- beyond.
- 6. Recognise simple similarities and differences between periods of time.
- 7. Confidently identify differences between celebrations, festivals and places of worship and begin to identify similarities.
- 8. I can explain what religion means, how religion is important to people and suggest why. 9. I can name religions and suggest how religions are celebrated. 10. I will respect the
- opinions of others.

  11. I understand that not every person will follow a religion.
- 12. I can identify important religious artefacts and what they could be used for.
- 13. I can identify human and physical features on a World map and their uses.
- 14. I can use a map with symbols and identify their meaning and what they are used for.
  15. I can name the
- continents and find countries on a World map or Atlas.
- 16. I can identify and name deserts and oceans.
- 17. I can interpret and find information on maps e.g. Ordnance Survey Maps.
- 18. I can explain the

- Calculate results, present and interpret observations, evaluate and explain data in relation to their prediction and identify further questions.
- 8. I can explain why carbon is important and where it can be found, and the impact on the environment.
- I can demonstrate the rules for working safely with scientific equipment.
   I can explain what fossil fuels are and what they are used for, including the stages of the carbon cycle.
- 11. I can use words such as respiration and combustion to describe reactions.
- 12. I can name the three main rock types and discuss the rock cycle.13. I can explain the importance of
- recycling for Earth's limited resources.

  14. I can explain how gravity works on different planets.
- 15. I can explain the composition of the Earth's atmosphere, using scientific vocabulary.
- 16. I can explain how carbon use damages the environment and how we can use renewable energies.
- 17. I can use scientific processes to separate and filter mixtures.
- 18. I can observe and participate in chemical reactions and chemical changes, using the correct scientific terminology.
- 19. I can explore physical and chemical changes and participate in safe scientific experiments.
- 20. I can explore and use indicators to infer information e.g. whether a substance is acidic, alkaline or neutral.
- 21. I can use the pH scale confidently. 22. I can suggest ways in which the human lifestyle can impact a human foetus.
- 23. I can name and label parts of the human body, including the penis and vagina and discuss their functions.24. I can explain reproduction in humans, and understand and explain

- for an audience.
  5. Start to explore how the
- development of a design needs to be in the best interest of the user. 6. Explore the reasons for
- and write a simple specification.
- 7. Test and evaluate their ideas.
- 8. I can explain that sound is caused by vibrations and suggest how this works.
  9. I can explore and analyse changes in sound and light, including natural light and
- man-made light.

  10. I can explore and explain how light and sound travel.
- 11. I can explain what reflection and refraction are and how they work.
- 12. I can explain and show how magnets can be used in real life situations.
- 13. I can explore magnetism with a compass to find direction on Earth with increasing independence.
- 14. I can make an electrical circuit with diagrams and explain how they work.15. I can explain why an electrical circuit may not work
- close the loop to create a complete closed circuit.

  16. I can sort materials into different groups e.g. magnetic and non-magnetic and

explain my findings.

and suggest how to fix it e.g.





- 27. I can explore key values, including democracy and the rule of law.
- 28. To explain how the climate has changed over time.
- 29. To explore human's impact on the climate and landscape and what we can do now.
- 30. To use primary and secondary sources in my work or research.
- 31. I will develop an understanding of what happened in World War One and Two and the impacts on society during and after.
- 32. I will explore and describe different ceremonies.
- 33. I can explain the difference between right and wrong.
- 34. I can explore the importance of music in different cultures and religions.

photosynthesis.

- 32. I can explain respiration (aerobic and anaerobic).
- 33. I can explain the menstrual cycle and how a baby is made.
- 34. I can discuss reproduction in plants.
- 35. I can discuss energy requirements in terms of diet.
- 36. I can explain the role of bacteria.
- 37. I can explain the impact of smoking, exercise and illegal drugs.
- 38. I can investigate where energy comes from and suggest which may be better for the environment than others.
- 39. I can explore reactive and non-reactive metals.
- 40. I can explore how different metals are extracted.
- 41. I can use my knowledge of forces in real life situations.
- 42. I can explain that living things are made of cells and say where DNA is located in a cell.
- 43. I can compare animal cells and human cells.
- 44. I can use a microscope confidently.
- 45. I can explain the importance of biodiversity.
- 46. I can explain the function of bones and muscles in humans.
- 47. I can begin to use a speed-time graph.
- 48. I can read a scientific graph.
- 49. I can explain the spacing of particles in solids, liquids and gases.
- 50. I will know what an atom, an element and a compound are.
- 51. I can explain how energy can be transferred from one object to another.
- 52. I can identify different types of energy, their advantages and disadvantages.
- 53. I can understand the importance of photosynthesis and pollination.

impact of weathering and erosion.

- 19. I can use the terms old and new, ancient and modern to discuss history.
- 20. I can discuss the impacts that history has on the modern day and why.
- 21. I can discuss topics such as the dissolution of the monasteries and what happened.
  22. I will analyse cultural social and
- 22. I will analyse cultural, social and technological changes in history.
- 23. I can suggest how religion supports people and why this is important.
- 24. I can discuss rituals and celebrations of life associated with death in different religions.
- 25. I can explore key values, including democracy and the rule of law.
- 26. To explain how the climate has changed over time and why.
  27. To explore human's
- impact on the climate and landscape and what we can do now.
- 28. To use and explain primary and secondary sources in my work or research.
- 29. I will develop an understanding of what happened in World War One and Two and the impacts on society during and after.

the functions of male and female reproductive systems.

- 25. I can explain the importance of photosynthesis and how it works.26. I can explain respiration (aerobic and anaerobic) and how it works.
- 27. I can explain what the menstrual cycle is, how it works and how a baby is made.
- 28. I can explain how plants reproduce.
  29. I can discuss energy requirements in terms of diet and why diet is important.
  30. I can analyse the role of bacteria in the body e.g. illnesses but also healthy gut bacteria.
- 31. I can explain the impact of smoking, exercise and illegal drugs on the body. 32. I can investigate and explore where energy comes from and suggest which may be better for the environment than others.
- 33. I can explore reactive and non-reactive metals and share my findings.
- 34. I can explore how different metals are extracted and share my findings.
  35. I can use my knowledge of forces in
- real life situations and explain my findings.
- 36. I can explain that living things are made of cells and explain where DNA is located in a cell.
- 37. I can compare animal cells and human cells and share my findings.
  38. I can use a microscope confidently
- and accurately.
  39. I can explain the importance of biodiversity.
- 40. I can explain and analyse the function of bones and muscles in humans, including teeth.
- 41. I can use a speed-time graph.
- 42. I can read a scientific graph and discuss my findings.
- 43. I can explain the spacing of particles in solids, liquids and gases and suggest how these change during chemical





describe different ceremonies in different cultures and religions. 31. I can explain the difference between right and wrong and how to make choices.  32. I can explore the importance of music in different cultures and religions and give p	reactions.  44. I will know what an atom, an element and a compound are and can describe them.  45. I can explain and suggest how energy can be transferred from one object to another.  46. I can identify different types of energy, and suggest their advantages and disadvantages.  47. I can explore the importance of photosynthesis and pollination and explain my reasons.
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### Key Stage 4 (Year 10 and Year 11) Curriculum

Choose an AQA Unit Award Certificate appropriate to your classes needs each term.

Cycle 1 - 23/24	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	The Power of Physics - Space physics! - Stars in our galaxy and other galaxies Main features of space The light year as a unit of astronomical distance - Structure of matter, atoms, nuclear fission, radioactive materials Electricity, currents - Magnetism and electromagnetism.	Alternative Christmas -Religion in the UK Christianity - Christmas Islam - Eid Hinduism - Diwali Buddhism - Bodhi Day Sikhism - Seva Judaism - Hanukkah - Buildings, symbols, explanations, clothing, religious leader Experience each within class or through trips. Electricity in the home	Curious with Chemistry - Natural/man-made Atomic structure, the periodic table, structure/ properties of materials Pure and impure substances, separating Chemical changes, pH Recycling chemical process Environmental impact Rate of chemical change.	Medical Emergencies How pandemics happen, personal hygiene, the role of vaccinations and the development of public health	Hola Mexico - Similarities/differences - Day of the dead Food - Deserts - Wildlife - Trade - Landscape	China  Key Places in China The Difference between and democratic and communist government Key points in HIstory

Cycle 2 - 24/25	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Origins of the Universe - Different religious perspectives First life Dinosaurs - Extinction - Future of the planet? - Photosynthesis - Ecosystems, biodiversity, human impact Pollutants inc air CO2 and the Earth's climate Water resources	Not Christmas!  - How different countries celebrate.  - Past/present.  - Food  - Plan an alternative Christmas.  - New Year  - Plan a party.  - Alternative New Years e.g. Chinese.	Brilliant Biology - Chemical reactions needed to sustain life.  - Cells, genome Structure and function of the human circulatory system Nervous system Health, disease, medicine inc HIV/AIDS Evolution, inheritance, variation.	Lessons from History - Life before / the Holocaust Recap WW2 - Why / where Escalation - Getting to camps, location Inside the camps Rescue	North America -9/11 - Cities - San Andreas fault - Human geography - Ordnance survey - Urbanisation - Fun with flags.	Changes/ Refugees Reasons for refugees, research countries that have been left and why, life as a refugee, including challenges faced. Bias and fake news, recap Holocaust Lead Refugee Awareness Week





obtaining potable water. - Energy, not/renewable. -			

### **■ KS4 WOW-In, WOW-Out and Trip Ideas**

	KS4 - Access			KS4 - Build	
Humanities	Science	Technologies	Humanities	Science	Technologies
1. Develop knowledge about the world including the UK and locality knowledge. 2. Explore changes in climate, environment and landscapes and explore how to look after our world. 3. Understand basic subject specific vocabulary. 4. Explore the idea of evidence shown in sources and what we can learn from them. 5. Explore periods of history, key events and people in living memory and beyond. 6. Explore historical sources. 7. Recognise celebrations, festivals and places of worship. 8. I can sequence events. 9. I can identify objects that are important to both myself and to other people. 10. I can identify key special people in my life. 11. I can identify what is safe and what is unsafe. 12. I can make my own choices. 13. I can help to make decisions in school. 14. I will understand that I have rights.	1. Be involved with experiment preparation e.g. getting equipment. 2. Experience a range of experiments. 3. Observe experiments. 4. Explore experiments. 5. Be presented with data. 6. Seek out different adults. 7. Be exposed to scientific vocabulary. 8. I can explore acids and alkalis. 9. I can observe reactions. 10. I can take part in investigations. 11. I can choose the appropriate equipment that I will need. 12. I can start to separate solids e.g. rocks from soil. 13. I can use a sieve to separate solid materials. 14. I can explore chromatography. 15. I can match materials. 16. I can explore an object with the use of a microscope. 17. I can name some planets in the solar system. 18. I can suggest what the	1. Explore algorithms and how to problem-solve using digital programmes. 2. Start to create digital content. 3. Use technology and digital media safely and respectfully, keeping personal information private. 4. Identify technology used both in school and beyond school and what these may look like. 5. Develop an understanding of how the design of an object helps the user. 6. Explore shaping and finishing. 7. Show an interest in what they have designed. 8. I can explore magnetic materials by using magnets. 9. I can make sounds with my body e.g. stamp my feet, clap my hands. 10. I can recognise a	1. Compare areas of the UK with similar areas of non-European countries e.g. tourism, transport. 2. Develop knowledge of changes in climate, environment and landscapes. 3. Use basic geographical vocabulary to describe human and physical features. 4. Carryout simple fieldwork and observational skills in their surrounding environment. 5. Identify possible reasons for historical events and their consequences. 6. Know where artefacts/people/events fit chronologically. 7. Being to identify differences in celebrations, festivals and places of worship. 8. I can sequence events from the past and present. 9. I can identify countries using a map or Atlas. 10. I can identify objects that are important to both myself and to other people, in life	1. Predict and plan experiments. 2. Select equipment and carry out experiments gathering simple data. 3. Make careful observations and take accurate measurements using standard units where appropriate. 4. Ask and answer questions during experiments. 5. Present their data. 6. Communicate their results to different people. 7. Increase their use of scientific- vocabulary. 8. I know that there are gases in the Earth's atmosphere. 9. I can explore and observe acids and alkalis. 10. I can explain what fuel is and what fuel is made from. 11. I know that carbon dioxide in the atmosphere is increasing and why. 12. I can suggest why global warming is happening. 13. I know that a mixture contains two or more substances and how they can be separated. 14. I can observe and explain reactions and take part in investigations and experiments. 15. I can choose the appropriate equipment that I will need and suggest what it is used for. 16. I can begin to interpret chromatography. 17. I can explore distillation to separate liquids with different boiling points.	1. Analyse and use problem solving and design skills across a range of technological platforms. 2. Explore how to use information technology systems creatively and knowledgeably. 3. Explain how to protect their privacy online and how to seek support. 4. Identify how changes to technology could affect safety. 5. Research design ideas and analyse a range of existing products. 6. Choose materials, components,tools and equipment according to their functional properties and aesthetic qualities. 7. Evaluate their own product against their design ideas. 8. I can explore magnetic materials by using magnets. 9. I can explain how I can use magnetism. 10. I know that magnetic poles can attract and repel objects. 11. I know that the Earth has a magnetic field. 12. I can explore how a compass can be used. 13. I can construct an electromagnet. 14. I can suggest reasons for the strengths in different electromagnets





- 15. I can identify key people who can help me e.g. teachers, doctors.
- 16. I will begin to understand the importance of being kind towards others.
- 17. I can share.
- 18. I can explore key people from history.
- 19. I can take part in democratic activities in school and give my own opinion/choice.
- 20. I can understand the difference between public and private.
- 21. I can understand that a religious building is a special place.
- 22. I can explore religious symbols.
- 23. I can identify key people who can help us by their uniform.
- 24. I can explore job roles.
- 25. I can take part in celebrations, and celebrations of different faiths.
- 26. I can explore the weather e.g. sun, wind etc.
- 27. I can participate in recycling.
- 28. I can explore how to look after the environment e.g. not littering. 29. I can explore what fundraising is.
- 30. I can express my likes and dislikes.
- 31. I can share.
- 32. I can celebrate my achievements, both my own and others'.
- 33. I can explore the life stages of animals, including humans.
- 34. I can use the terms same and different, fair and unfair.
- 35. I can understand the meaning of consent.

- difference is between day and night.
- 19. I can explain that the moon orbits the Earth.
- 20. I can explore objects that float and sink.
- 21. I can make magnets move fast and slow.
- 22. I can observe objects moving at different speeds e.g. dropping an object in a parachute.
- 23. I can explore vehicles moving on different surfaces.
  24. I can sort rocks based on a criteria e.g. size.
- 25. I can make comparisons.
- 26. I can recognise what a fossil is e.g. the remains of a plant or animal.
- 27. I can identify animals that eat different foods.
- 28. I can identify animals that eat meat and animals that eat plants.
- 29. I can create a food chain.
- 30. I can explore energy transfer in real life scenarios e.g. hair dryers.
- 31. I can observe renewable energy sources.
- 32. I can recognise primary colours.
- 33. I can mix colours to make secondary colours.
- 34. I can identify colours.
- 35. I can match animals and their offspring.
- 36. I can sequence the human life cycle.
- 37. I can show knowledge of the male and female reproductive systems.
- 38. I can identify appliances that use electricity.
- 40. I can safely explore how to construct an electrical

- change in tempo in sound.
- 11. I can explore rhythm and body percussion.12. I can classify materials into groups.13. I can suggest uses

for different materials.

and in stories.

law.

- 11. I can identify key special people in my life and who I trust.
- 12. I can explore how to make my own decisions.13. I understand that some decisions are protected by
- 14. I can discuss the democratic system.
- 15. I understand that I have rights and what this means.
  16. I will discuss how to get help in the community e.g. police officers, the legal system.
- 17. I will understand the importance of being kind towards others and explore the news.
- 18. I can explain the importance of sharing.
  19. I can investigate key people from history.
  20. I can take part in democratic activities in school and give my own

opinion/choice.

- 21. I can discuss what it means to be "fair" and religious views of fairness.
  22. I can explore how to make situations fair e.g. education and wealth.
- 23. I can investigate the reliability of secondary sources e.g. photographs. 24. I can begin to discuss
- what Parliament is and how elections work.
  25. I can understand that a
- religious building is a special place.

  26. I can explore religious
- symbols.
- 27. I can identify common

- 18. I can carry out a flame test.
- 19. I can use a microscope.
- 20. I can recognise the features of fingerprints e.g. whorls.
- 21. I can explain what blood is made of e.g. red blood cells, platelets etc.
- 22. I can separate colours using chromatography.
- 23. I can have an understanding of what DNA is.
- 24. I know that the moon orbits the Earth. 25. I can name the planets of the Solar
- System in order.
  26. I can suggest what rockets are used for in
- space.
- 27. I can explain what gravity is.
- 28. I can suggest what a spacecraft would need to take into space.
- 29. I can suggest what satellites are used for. 30. I know that fossils show evidence of living
- organisms.
- 31. I can suggest how living things have changed through evolution.
- 32. I can use the term "species".
- 33. I can identify variations in plants and animals of the same species.
- 34. I can suggest which adaptations plants and animals have in order to survive and compete.
- 35. I can identify a habitat and suggest what could happen to the animals if their habitat changes.
- 36. I can discuss the relationship between health and disease.
- 37. I can describe diseases.
- 38. I can name common infections and sexually transmitted infections.
- 39. I can suggest how microbes and bacteria could enter the body.
- 40. I can explain the importance of the water cycle and the carbon cycle.
- 41. I can explain the role that microorganisms play in cycling the materials through an ecosystem.
- 42. I can suggest how some animals are adapted for their environment and how some are adapted to be predators.

- e.g. the number of coil turns.
- 15. I can label a magnet.
- 16. I can interpret information about energy and renewable energy.
- 17. I can suggest how to generate energy using renewable sources.
- 18. I can explain the motion of wave and wavelength, including sound waves.
- 19. I can suggest how to power a home using renewable energy sources e.g. solar panels.
- 20. I know how to increase the security of a message using coding e.g. morse code.
- 21. I can suggest how to use light to transmit a message.
- 22. I can begin to understand how light travels.
- 23. I can identify household items as using radio waves e.g. communication devices.
- 24. I can identify visible light as being part of the electromagnetic spectrum.
  25. I can identify the colours of the electromagnetic spectrum.
- 26. I know that body heat is detected using infrared sensors and thermal imaging.
- 27. I know that warm and hot objects emit infrared radiation.
- 28. I can use a microwave for cooking.
- 29. I can suggest how technology can be useful to detect illness e.g. x-rays.
- 30. I can explain that some medical procedures use UV radiation and suggest how to reduce the risk of exposure to UV radiation.
- 31. I can interpret data about the use of sun protection e.g. sun cream.
  32. I can suggest how x-rays work
- e.g. absorbing x-rays into the bone to produce shadow pictures, and how to balance the risk against the benefits of x-rays.





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41. I can name and label parts of the human body. 42. I can identify what humans need to stay alive. 43. I can identify things that are needed in order to have a healthy body. 44. I can identify ways to protect my body e.g. from the 45. I can observe heating and cooling experiments. 46. I can explore mixtures by using the senses. 47. I can recognise forces in everyday situations. 48. I can investigate the effects of friction by using different surfaces. 49. I can identify the changes that take place in puberty. 50. I can suggest why exercise and a healthy diet are important. 51. I can suggest how to store food correctly. 52. I can identify items in a first aid kit.

stereotypes.

28. I can explore how to challenge stereotypes.
29. I can explore religious and cultural celebrations.
30. I can discuss energy sources in the UK.
31. I can discuss fossil fuels and the challenges they present.

32. I can make comparisons about energy usage.

33. I can make a well informed and reasoned argument.

34. I can understand that people respond to emotions in different ways.

35. I can discuss how to look after the environment e.g. not littering.

36. I can explore what inequality means.

37. I can explore what fundraising is and how this money is spent.

38. I can explore the ways in which people express and follow their own beliefs.
39. I can explain what consent means.

43. I can construct food chains and include herbivores, carnivores and omnivores.

44. I can interpret food webs.

45. I can suggest how changes can affect a food web.

46. I can carry out simple environment surveys.

47. I know that fossils provide evidence of living organisms.

48. I can suggest how living things have changed through evolution, and how some have become extinct and endangered.

49. I can explain the relationship between health and disease.

50. I can name sexually transmitted diseases. 51. I know that the immune system fights diseases.

52. I can suggest what to do if I feel unwelle.g. go to the doctor, take medicine safely.53. I can explore the ways in which the media

portrays health. 54. I can construct a food chain or a food web

55. I can explain the importance of the carbon cycle and the water cycle.

56. I can explain the importance of organisms cycling materials through the ecosystem.

57. I can interpret visual chemical reactions.

58. I can interpret the reactivity of materials in experiments.

59. I can identify laboratory apparatus e.g. beaker, flask etc.

60. I can start to interpret information and data on a graph.

61. I can recall the names of the female and male reproductive organs, their functions, and label them on a diagram.

62. I can recall information about the female and male reproductive organs e.g. that sperm and egg cells have 23 chromosomes each.

63. I can sequence the human life cycle in more detail e.g. from conception.

64. I can identify changes that happen in the female body after conception.

65. I can explain how hormones can be used in contraception.

66. I can explain how our genes come from

33. I know that batteries produce electricity from a chemical reaction.34. I can explore forces and how unbalanced forces will change the motion of an object.35. I can explore the effects of air

resistance e.g. on falling objects.

36. I can explore how elastic material can be affected by forces.

37. I can identify ways to stay safe on the road e.g. not speeding.38. I can suggest why we have speed limits in place on our roads.

39. I know that more force is needed to slow a fast-moving object e.g. a fast car.

40. I can suggest ways to reduce impact forces e.g. airbags and seatbelts in cars.









KS4 - Connect		KS4 - Deepen			
Humanities	Science	Technologies	Humanities	Science	Technologies
1. Deepen their understanding of the world and their locality. 2. Begin to understand the links between human and physical geography and discuss ways to look after our world. 3. Develop human and physical geography vocabulary, skills and knowledge. 4. Carryout fieldwork and observational skills in the wider environment. 5. Develop knowledge of periods of history, key events and people in living memory and beyond. 6. Recognise simple similarities and differences between periods of time. 7. Confidently identify differences between celebrations, festivals and places of worship and begin to identify similarities. 8. I can sequence events from the past and present and explain why. 9. I can identify countries using a map or Atlas and name them. 10. I can explore Britain's role in the World e.g. supporting refugees. 11. I can explain the role of the government and Parliament. 12. I can explain why the key people in my life are important and why.	1. Use scientific knowledge to develop hypotheses and plan experiments. 2. Select the right equipment and carry out experiments appropriately gathering accurate data. 3. Record observations and measurements using a range of methods. 4. Suggest possible improvements and further investigations. 5. Collect and present data in a variety of ways. 6. Communicate results to a range of audiences. 7. Develop their use of scientific vocabulary. 8. I know that there are gases in the Earth's atmosphere, and can suggest how this has changed over time. 9. I can suggest which gases are in the Earth's atmosphere. 10. I can explain that the levels of CO2 in the atmosphere are increasing and why. 11. I can explain what fuel is and what fuel is made from. 12. I can suggest why global warming is happening. 13. I know that a mixture contains two or more substances and how they can be separated. 14. I can explain what is meant by pure and impure substances. 15. I can suggest how to obtain a soluble substance through crystallisation. 16. I can use chromatography to separate mixtures, and can interpret the data from this. 17. I can explain that liquids can be separated if they have different boiling points - distillation. 18. I can explain reactions and actively take part in investigations and experiments.	1. Use problem solving, design skills and analytical skills with technology on multiple platforms.  2. Understand how to use systems creatively and knowledgeably.  3. Explain how to protect their privacy online and what to do if there are any concerns.  4. Use digital media safely and creatively, including re-using, revising and repurposing digital artefacts for an audience.  5. Start to explore how the development of a design needs to be in the best interest of the user.  6. Explore the reasons for and write a simple specification.  7. Evaluate designs against a chosen criteria or specification.  8. I can explore and identify magnetic materials by using magnets.  9. I can explain how I can use magnets to attract magnetic materials.  10. I can identify the North and South poles of a magnet, and know that the magnetic poles	1. Consolidate and extend their understanding of the world with detail and precision.  2. Be able to describe how human and physical geography interact.  3. Have knowledge of all elements of humans and physical geography.  4. Analyse and interpret data collected during fieldwork and observation.  5. Have a secure knowledge and understanding of significant events and people in history.  6. Understand how knowledge of the past is constructed.  7. Discuss similarities and differences between celebrations, festivals and places of worship.  8. I can sequence events from the past and present and explain my ideas.  9. I can identify and name countries using a map or Atlas.  10. I can analyse Britain's role in the World e.g. supporting refugees.  11. I can analyse the role of the government and Parliament.  12. I can explain why the key people in my life are important and why, and how they help me.  13. I can explain how I can	1. Use scientific theories and explanations to develop hypotheses and plan experiments to observe and test.  2. Select the right equipment and carry out experiments appropriately gathering accurate data using sampling techniques when needed.  3. Make and record detailed observations and measurements using a range of apparatus and methods.  4. Evaluate methods and suggest possible improvements and further investigations.  5. Apply the cycle of collecting, presenting and analysing data in a variety of ways.  6. Recognise the importance of peer review of results and of communication of results to a range of audiences.  7. Develop their use of scientific vocabulary and nomenclature.  8. I can explain that there are gases in the Earth's atmosphere, and can explain how this has changed over time.  9. I can explain which gases are in the Earth's atmosphere.  10. I can analyse the levels of CO2 in the atmosphere and explain why they are increasing.  11. I can explain what fuel is and what fuel is made from, both renewable and non-renewable.  12. I can explain why global warming is happening.  13. I can demonstrate how to separate a mixture containing two or more substances.	1.Be able to develop and apply problem-solving, design skills and analytical skills across information. technology platforms.  2. Develop an understanding of computer science, developing capability, creativity and knowledge with information technology and digital media.  3. Describe how to protect their privacy online, including how to identify and report any concerns.  4. Understand how changes to technology could affect safety, and how to keep themselves safe online.  5. Use research and exploration to solve design problems recording their ideas.  6. Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations  7. Test, evaluate and refine their ideas.  8. I can identify and analyse magnetic materials by using magnets.  9. I can explain how I can use magnets to attract magnetic materials and why some are more magnetic than others.  10. I can identify the North and South poles of a magnet, and can explain that the magnetic poles can attract and repel objects and demonstrate this.  11. I can explain that the Earth has a magnetic field and can explain how this works by using a compass.  12. I can construct an electromagnet and explain my work.  13. I can explain that the strength of a magnetic field depends on factors e.g. the number of coils in the magnet, the distance from the conductor etc.  14. I can explain the uses for electromagnets e.g. in MRI scans.  15. I can analyse information about energy





- 13. I can explain how I can make my own decisions.14. I can show respect towards the views and opinions of others.
- 15. I can explain that some decisions are protected by law.
- 16. I can discuss the democratic system and what this means.
- 17. I understand and can explain that I have rights and what this means.
- 18. I can carry out my own research, using secondary sources e.g. the news.
- 19. I can investigate the reliability of secondary sources e.g. photographs.
  20. I will discuss how to get help in the community e.g.
- 21. I can investigate key people from history and what they did.

the legal system.

- 22. I can analyse what fairness means and how this can be seen in my community.
- 23. I will begin to investigate governments and systems of government in countries beyond the UK.
- 24. I can investigate questions and explain my own answers or findings.
  25. I can discuss diversity in the UK.
- 26. I can explain that religious buildings, artefacts and symbols are special.
  27. I can identify common stereotypes and explore how to challenge these.
  28. I can explore religious and cultural celebrations

- 19. I can choose the appropriate equipment that I will need and explain what it is used for.
- 20. I can carry out a flame test and explain my findings.
- 21. I can use a microscope and explain my findings.
- 22. I can recognise the features of fingerprints e.g. whorls, and record these.
- 23. I can identify what blood is made of e.g. red blood cells, platelets etc.
- 24. I can explain what DNA is and that a person will inherit their DNA from both parents.
- 25. I can explain how the moon orbits the Earth.
- 26. I know that other planets have moons.
- 27. I can suggest how a rocket is launched into space using my knowledge of forces.
- 28. I can name the planets of the Solar System in order, and some of their features.
- 29. I can suggest which resources would be needed for a manned spacecraft. 30. I can suggest the function of spacecraft which orbit the Earth e.g. satellites. communication etc.
- 31. I know that fossils show evidence of living organisms and can suggest how fossils are formed.
- 32. I can suggest how living things have changed through evolution, and how some have changed only a little.
- 33. I can use the term "species".
- 34. I can identify variations in plants and animals of the same species.
- 35. I can suggest which adaptations plants and animals have in order to survive and compete and why.36. I can identify a habitat and can say what could happen to the animals if their habitat changes.
- 37. I can discuss and explain the relationship between health and disease.

- can attract and repel objects.
- 11. I know that the Earth has a magnetic field and can suggest how this works with a compass.

  12. I can construct an electromagnet.
- strength of a magnetic field depends on factors e.g. the number of coils in the magnet, the distance from the

13. I know that the

- conductor etc . 14. I can suggest uses for electromagnets e.g. in MRI scans.
- 15. I can interpret and explain information about energy and renewable energy.
- 16. I can suggest and explain how to generate energy using renewable sources.
- 17. I can explain and interpret the motion of wave and wavelength, including sound waves.
  18. I can suggest how to power a home using renewable energy sources and why this is important e.g. solar
- panels.
  19. I can explain how to increase the security of a message using coding e.g. morse code.
- 20. I can explain how to use light to transmit a message.
- 21. I can suggest how light travels.
- 22. I can identify and explain household items

- make my own decisions both at school and in the community.
- 14. I can show respect towards the views and opinions of others.
- 15. I can explain that some decisions are protected by law and why.
- 16. I can explain how the democratic system works and what this means.
- 17. I understand and can explain that I have rights and what this means.
- 18. I can carry out my own research, using secondary sources e.g. the news and present my findings and research.
- 19. I can investigate the reliability of secondary sources e.g. photographs and present my findings. 20. I will explain how to get help in the community e.g. the legal system.
- 21. I can investigate key people from history and explain what they did.
  22. I can analyse what fairness means and how this can be seen in my community.
- 23. I will investigate governments and systems of government in countries beyond the UK, both democratic and non-democratic.
- 25. I can discuss diversity in the UK and what this means.
- 26. I can explain that religious buildings, artefacts and symbols are special and why.

- 14. I can explain what is meant by pure and impure substances.
  15. I can explain and demonstrate how to obtain a soluble substance through crystallisation.
- 16. I can use chromatography to separate mixtures, and can interpret the data from this.
- 17. I can explain that liquids can be separated if they have different boiling points distillation.
- 18. I can explain and analyse reactions and actively take part in investigations and experiments.
- 19. I can choose the appropriate equipment that I will need and explain what it is used for and why I have chosen it.
- 20. I can carry out a flame test and explain and analyse my findings.
- 21. I can use a microscope accurately and explain my findings.
- 22. I can recognise and identify the features of fingerprints e.g. whorls, and record these. 23. I can suggest and identify
- what blood is made of e.g. red blood cells, platelets etc.
- 24. I can explain what DNA is and that a person will inherit their DNA from both parents.
- 25. I can accurately explain how the moon orbits the Earth.
  26. I know that other planets
- have moons and can name them.
- 27. I can suggest and explain how a rocket is launched into space using my knowledge of forces.
- 28. I can name the planets of the Solar System in order, and

- and renewable energy.
- 16. I can explain how to generate energy using renewable sources and why this is important.
- 17. I can explore and analyse the motion of wave and wavelength, including sound waves
- 18. I can explain the ways to power a home using renewable energy sources and why this is important e.g. solar panels.
- 19. I can explain how to increase the security of a message using coding e.g. morse code, and why this could be important.
- 20. I can explain how to use light to transmit a message and why this could be important.
- 21. I can explain how light travels.
- 22. I can identify and explain household items as using radio waves e.g. communication devices.
- 23. I can identify and explain visible light as being part of the electromagnetic spectrum and share my findings.
- 24. I can identify the colours of the electromagnetic spectrum and share my findings.
- 25. I can explain how and why body heat is detected using infrared sensors and thermal imaging.
- 26. I can explain that warm and hot objects emit infrared radiation.
- 27. I can use a microwave for cooking independently.
- 28. I can explain how and why technology can be useful to detect illness e.g. x-rays. 29. I can explain that some medical procedures use UV radiation and explain how to reduce the risk of exposure to UV radiation.
- 30. I can analyse and interpret data about the use of sun protection and say why it is important e.g. sun cream.
- 31. I can explain how x-rays work e.g. absorbing x-rays into the bone to produce shadow pictures, and suggest how to balance the risk against the benefits of x-rays.





and show respect.
29. I can discuss energy sources in the UK.

30. I can discuss fossil fuels and the challenges they present to people and the environment.

31. I can make a well informed and reasoned argument.

32. I can discuss how to look after the environment e.g. not littering and how I can care for my environment.

33. I can discuss different forms of spirituality and worship around the world.
34. I can raise important.

critical questions.
35. I can analyse arguments

clearly.
36. I can reflect on my own

36. I can reflect on my own ideas.

37. I can explore what equality and inequality means.

38. I can explore what fundraising is and how this money is spent in the community.

39. I can explore the ways in which people express and follow their own beliefs. 40. I can explain what consent means.

38. I can describe diseases and their symptoms.

39. I can name common infections and sexually transmitted infections and suggest some of their symptoms.
40. I can suggest how microbes and bacteria could enter the body.

41. I can explain the importance of the water cycle and the carbon cycle.

42. I can explain the role that microorganisms play in cycling the materials through an ecosystem and why this is important.

43. I can explain how some animals are adapted for their environment and how some are adapted to be predators.

44. I can construct and present food chains and include herbivores, carnivores and omnivores.

45. I can interpret the data from food webs.

46. I can suggest how changes can affect a food web.

47. I can carry out environmental surveys with support.

48. I can explain that fossils provide evidence of living organisms.

49. I can suggest how living things have changed through evolution, and how some have become extinct and endangered.

50. I can explain the relationship between health and disease.

51. I can explain that the immune system fights diseases.

52. I can suggest and explain what to do if I feel unwell e.g. go to the doctor, take medicine safely.

53. I can explore the ways in which the media portrays health and discuss.54. I can interpret and examine visual chemical reactions.

55. I can observe and interpret the reactivity of materials in experiments. 56. I can identify and name laboratory apparatus e.g. beaker, flask etc.

57. I can interpret information and data

as using radio waves e.g. communication devices.

23. I can identify and explain visible light as being part of the electromagnetic spectrum.

24. I can identify the colours of the electromagnetic spectrum.
25. I can explain that

body heat is detected using infrared sensors and thermal imaging.
26. I know that warm and hot objects emit infrared radiation.

27. I can use a microwave for cooking with increased independence.
28. I can suggest how

and why technology can be useful to detect illness e.g. x-rays. 29. I can explain that some medical

procedures use UV radiation and suggest how to reduce the risk of exposure to UV radiation.

30. I can interpret data about the use of sun protection and say why it is important e.g. sun cream.

31. I can explain how x-rays work e.g. absorbing x-rays into the bone to produce shadow pictures, and how to balance the risk against the benefits of x-rays.

27. I can identify common stereotypes and explain how to challenge these.
28. I can discuss religious and cultural celebrations and show respect.
29. I can discuss energy sources in the UK, both

sources in the UK, both renewable and non-renewable.

30. I can analyse fossil fuels and the challenges they present to people and the environment.

31. I can make a well informed and reasoned argument and present my ideas.

32. I can explain how to look after the environment e.g. not littering and how I can care for my environment.

33. I can explain different forms of spirituality and worship around the world. 34. I can raise important, critical questions and support my ideas with evidence.

35. I can analyse arguments clearly, and I can reflect on my own ideas.

36. I can explain what equality and inequality means.

37. I can participate in fundraising and discuss how this money could be spent in the community.
38. I can explore the ways in which people express and follow their own beliefs.
39. I can explain what consent means.

identify some of their features. 29. I can suggest which resources would be needed for a manned spacecraft and why. 30. I can suggest and identify the function of spacecraft which orbit the Earth e.g. satellites, communication etc.

31. I know that fossils show evidence of living organisms and can explain how fossils are formed.

32. I can explain how living things have changed through evolution, and how some have changed only a little.

33. I can use the term "species" accurately.

34. I can identify variations in plants and animals of the same species and explain them.
35. I can suggest and explain

which adaptations plants and animals have in order to survive and compete and why.

36. I can identify a habitat and

can suggest what could happen to the plants and animals if their habitat changes. 37. I can discuss and explain the

relationship between health and disease.
38. I can identify diseases and

38. I can identify diseases an their symptoms.

39. I can name common infections and sexually transmitted infections and identify some of their symptoms. 40. I can explain how microbes and bacteria could enter the body.

41. I can explain the importance of the water cycle and the carbon cycle.

42. I can explain the role that microorganisms play in cycling the materials through an

32. I can explain how batteries produce electricity from a chemical reaction.

33. I can analyse and interpret forces and how unbalanced forces will change the motion of an object.

34. I can analyse and interpret the effects of air resistance e.g. on falling objects.

35. I can analyse and investigate how elastic material can be affected by forces.

36. I can identify and explain ways to stay safe on the road e.g. not speeding and why this is important.

37. I can identify why we have speed limits in place on our roads and why this is important.

38. I can explain that more force is needed to slow a fast-moving object e.g. a fast car, and why.

39. I can suggest ways to reduce impact forces e.g. airbags and seatbelts in cars and why these are important.





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58. I can name the female and male reproductive organs, their functions, and label them on a diagram.

59. I can explain the female and male reproductive organs and their functions e.g. that sperm and egg cells have 23 chromosomes each.

60. I can sequence the human life cycle in detail e.g. from conception.

61. I can identify and name changes that happen in the female body after conception.

62. I can explain how hormones can be used in contraception and how to use contraception safely.

63. I can discuss genes.

64. I can identify the stages in the production of electricity for the home e.g. the power grid.

65. I can explain how an electrical current enters the home for use.66. I can explain the design and use of electrical circuits and suggest why a circuit may not work.

67. I can explain how to save energy in the home.

68. I can identify and explain physical changes in reversible and irreversible reactions e.g. melting and boiling.

69. I can explain changes to my body's environment e.g. internal temperature and suggest how to maintain temperature.

70. I can name and locate internal organs and their functions.

71. I can explain how to maintain a healthy diet and how to maintain blood sugar levels.

72. I can explain what nerves do in the body e.g. nerves in the nose which are sensitive to the air

73. I can name the circulatory system, nervous system and digestive system and their functions.

74. I can explain how smoking can affect the lungs, and how people can be

32. I can explain that batteries produce electricity from a chemical reaction.
33. I can explore and interpret forces and how unbalanced forces will change the motion of an object.

34. I can explore and interpret the effects of air resistance e.g. on falling objects.

35. I can explore and investigate how elastic material can be affected by forces.

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43. I can identify how some animals are adapted for their environment and how some are adapted to be predators.

44. I can construct, present and interpret food chains which include herbivores, carnivores and omnivores.

45. I can analyse and interpret the data from food webs.

46. I can explain how changes can affect a food web.

47. I can carry out environmental surveys with minimal support.

48. I can explain that fossils provide evidence of living organisms and analyse the evidence.

49. I can analyse how living things have changed through evolution, and how some have become extinct and endangered. 50. I can explain and analyse the relationship between health and disease.

51. I can explain how the immune system fights diseases. 52. I can explain what to do if I feel unwell e.g. go to the doctor, take medicine safely.

53. I can explore and analyse the ways in which the media portrays health and discuss.

54. I can interpret and examine visual chemical reactions.

55. I can observe and interpret the reactivity of materials in experiments.

56. I can identify and namelaboratory apparatus e.g. beaker,flask etc and their uses.57. I can interpret and explain

information and data on a graph. 58. I can name the female and male reproductive organs, their





affected by passive smoking. 75. I can explain respiration e.g. carbon dioxide exits the body. 76. I can suggest and explain how to maintain a healthy lifestyle and why this is important. 77. I can suggest what I need to maintain health during exercise e.g. water, oxygen and glucose. 78. I know that some drugs and alcohol are addictive and can suggest the effects these would have on the body. 79. I can explain that the heart is a muscle and how it pumps blood around the body.		functions, and label them on a diagram.  59. I can explain the female and male reproductive organs and their functions e.g. that sperm and egg cells have 23 chromosomes each.  60. I can sequence and explain the human life cycle in detail e.g. from conception.  61. I can identify and explain the changes that happen in the female body after conception.  62. I can explain how hormones can be used in contraception and how to use contraception safely.  63. I can discuss genes.  64. I can identify and explain the stages in the production of electricity for the home e.g. the power grid.  65. I can explain how an electrical current enters the home for use.  66. I can explain the design and use of electrical circuits and suggest why a circuit may not work and how to fix this.  67. I can explain how to save energy in the home and why this is important.  68. I can identify and explain physical changes in reversible and irreversible reactions e.g. melting and boiling.  69. I can explain and analyse changes to my body's environment e.g. internal temperature and explain how to maintain temperature.  70. I can name and locate internal organs and explain their functions.  71. I can explain how to maintain a healthy diet and how to maintain lood sugar levels and why this is important.	



