USWORTH COLLIERY
PRIMARY SCHOOL

YEAR 3

KEY SKILLS, KNOWLEDGE & UNDERSTANDING CURRICULUM COVERAGE 2020-2021

SCIENCE

Year 3 & 4	**Working Scientifically** • Begin to raise their own relevant questions about the world around them • Should be given a range of scientific experiences including different types of science enquiries to answer questions • Can make and record a prediction before testing using scientific vocabulary and simple reasons. • Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions and which information needs to be collected • Set up simple practical enquiries, comparative and fair tests • Understands what a simple fair test is, recognise what a simple fair test is, when it is necessary and how it is fair. • Talk about criteria for grouping, sorting and classifying; and use simple keys • Use secondary sources and recognise when and how they might help them to answer questions that cannot be answered through practical investigations • With support helps to make decisions about what systematic and careful observations to make and how long to make them for and the type of simple equipment that might be used. • With support, begin to look for patterns and relationships (some naturally occurring) and decide what data to collect to identify them • Take fair and accurate measurements using standard units and a range of equipment (including thermometers and data loggers) appropriately. • Collect and record data from their own observations and measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys • With support, begin to make decisions about how to analyse this data • With help, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions from their findings • Use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences (including oral and written explanations, ICT, displays or presentations of results and conclusions) • With support discusses the success of their working methods and suggests ways of improving what they have already done.

Year 3	**Plants** • Identifies and describes the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. • Explores the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • Could work scientifically by: comparing the effect of different factors on plant growth, for example, the amount of light, the amount of fertiliser etc and how these vary from plant to plant • Investigates the way in which water is transported within plants. • Could work scientifically by: putting cut white carnations in coloured water or a similar experiment • Explores the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. • Could work scientifically by: observing plant life cycles at different stages over time to see how seeds are formed **Animals and Humans** • Identifies that animals, including humans, get nutrition from what they eat and they need certain nutrients so a nutritionally balanced diet is important • Describe and identify parts of the skeletal and muscular system of a human and their functions • Explain that humans and some other animals have skeletons and muscles that work together for support, protection and movement. • Could work scientifically by: Exploring ideas about what would happen if humans did not have skeletons. • Could work scientifically by: identifying and grouping animals with and without skeletons and observing and comparing their movement. • Could work scientifically by: Comparing, grouping and contrasting diets of different animals including pets to that of humans • Could work scientifically by: Design healthy meals based on their own research **Rocks** • Compares and groups together different kinds of rocks on the basis of their appearance and simple physical properties. • Describe and explain how different rocks can be useful to us, beginning to relate the properties of rock to their uses. • Could work scientifically by: observing rocks, in the local environment including those used in buildings and gravestones, and exploring how and why they might have changed over time. • Describes in simple terms how fossils are formed when things that have lived are trapped within rock. • Recognises that soils are made from rocks and organic matter. • Could work scientifically by: comparing different soils identifying similarities and differences • Could work scientifically by: using microscopes to classify rocks based on whether they have grains, crystals or whether they have fossils in them. • Could work scientifically by: investigating what happens to rocks in water and when they are rubbed together **Forces and Magnets**

Key Skills, Knowledge and Understanding

	• Compares how things move on different surfaces. • Compares and groups together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identifies some magnetic materials. • Notices that some forces need contact between two objects, but observe that magnetic forces can act at a distance • Describes magnets as having two poles (N & S). • Observes how magnets attract or repel each other and attract some materials and not others. • Predicts whether two magnets will attract or repel each other, depending on which poles are facing • Identify and investigate ways magnets can be used and are useful in everyday life • Could work scientifically by: Investigating the strengths of different magnets and find fair ways to compare them. • Could work scientifically by: predicting and investigating how far different things move different surfaces **Light** • Recognises that they need light in order to see things and that dark is the absence of light. • Notices that light is reflected from surfaces. • Recognises that shadows are formed when the light from a light source is blocked by a solid object. • Could work scientifically by: finding patterns in the way that the size of shadows change due to light source moving or distance away from the light shadow • Recognises that light from the sun can be dangerous and that there are ways to protect their eyes.

Key Skills, Knowledge and Understanding

WHOLE SCHOOL GEOGRAPHY OVERVIEW

Each topic will cover these 4 elements of geographical knowledge

- **Locational knowledge**
  Continent, hemisphere, position in relation to Equator, ocean, sea, major cities topographical features, land use (and change of land use) time zone
- **Human geography**
  Types of settlement and land use economic acuity including trade links distribution of natural resources including energy food minerals and water
- **Physical geography**
  Climate zones, biomes and vegetation belts, rivers mountains, volcano earthquakes and the water cycle
- **Environmental Impact/Effect**
  The effect of human behaviour on this location. Considering how and why it is changing, how the place compares with other places, what it could be like in the future and what can we could do to influence change?

The teaching of Fieldwork skills will be embedded within each topic.

- **Fieldwork Skills KS2**
  Use maps, atlases, globes and digital/computer mapping, use the eight points of a compass, four and six figure grid references, symbols and key including OS maps.

Year 3

Volcanoes, Earthquakes and Tsunamis - The power of the Earth

- **Locational knowledge** – locate Worlds famous volcanoes, continent, countries, identify on a globe / atlas, Northern and Southern Hemisphere
- **Human geography** – what is it like to live near a volcano and the impact on people's lives • **Physical geography –** Ring of fire, how earthquakes created, label parts of a volcano.
- **Environmental Impact/Effect –** ash cloud

Mountains

- **Locational knowledge –** locate mountain ranges in UK, Worlds highest mountains.
- **Human geography** what amenities are in the areas.
- **Physical geography –** What is the land like, what does the area look like? How can you locate mountain ranges on a map?
- **Environmental Impact/Effect –** tourism in an area.

The Mediterranean

- **Locational knowledge –** country, continent, countries in the Mediterranean
- **Human geography** what amenities are in the area, famous landmark, differences with the UK
- **Physical geography –** 'The Med' climate and differences with the UK
- **Environmental Impact/Effect –** tourism

GEOGRAPHY

Year 3	**Geographical Enquiry** • Use correct geographical words to describe a place and the events that happen there. • Identify key features of a locality by using a map. • Use 4 figure grid references. • Accurately plot NSEW on a map. • Use some basic OS map symbols. • Make accurate measurement of distances within 100Km. **Physical** • Use maps and atlases appropriately by using contents and indexes. • Label the different parts of a volcano.

	• Describe how volcanoes are created. • Describe how earthquakes are created. • Describe physical features in a locality. • Know and name the 8 points of the compass (N,NW, W, S, SW, SE, E, NE) • Know the names of the world's highest mountains. • Locate the Mediterranean and explain why it is a popular holiday destination. **Human** • Describe how volcanoes have an impact on people's lives. • Describe human features in a locality. • Explain why a locality has certain human features. • Explain why a place is like it is. • Know at least five difference between living in the UK and a Mediterranean country. **Geographical Knowledge** • Name and locate at least six cities in England. • Name four countries in the Northern Hemisphere and four in the Southern Hemisphere. • Locate and name some of the world's most famous volcanoes. • Know where the main mountain ranges are in the UK. • Name and locate many of the world's most famous mountain regions on maps.

WHOLE SCHOOL HISTORY OVERVIEW

When teaching each historical era, the 7 key history skills must be taught for each one.

- Constructing the Past
- Sequencing the Past/Chronology
- Continuity and Change
- Cause and Effect
- Significance and Interpretation
- Historical Enquiry
- Using Sources as Evidence

In each era children will learn about and compare some or all of the following historical themes

- Achievements (scientific and cultural)
- Housing and architecture
- Society (politics and class)
- Food Farming and Trade
- Entertainment
- Beliefs
- Weapons and warfare

HISTORY

Year 3 Autumn	***Would you like to spend all day underground?*** Local History - A study of Local History taking account of a period of history that shaped the locality.- Mining • **Achievements (scientific and cultural)** Technological advancements in the mines. Effect of coal on human lives. • **Housing and architecture** F pit, UCPS as mining school and Beamish • **Society (politics and class)** Victorian values and child labour. Population and jobs. Local significance – everything revolved around the mines. • **Food Farming and Trade** Whole area based around pit life • **Entertainments** How did people entertain themselves – what games were played at school? • **Weapons and warfare** Mining tools **Constructing the Past** • Understand when and why mining occured. Why did people need so much coal? Why did they mine it around here? Industrial revolution – powering new technologies. Why is there very little mining done now? **Sequencing the Past/Chronology** • Develop an understanding of concurrence of civilisations around the world during these times (Stone to Iron Age & Ancient Egypt) • Sequence the different developments and changes in mining over time and justify reasons. **Continuity and Change** • Identify the continuity and changes to the local area due to Mining – Jobs, population. • Understand that life in each time period would not have been the same for everyone living then - miners vs mine owners etc. Child labour. – How would their life have been different to our own? • Consider the technological advances brough about by the mines **Cause and Effect** • Identify the effects of the mining industry in the local area – How did life change for people in the North East when the mines opened? Jobs, wealth, entertainments, population, daily life. What happened when the mines closed? **Significance and Interpretation** • Consider the significance of the mining industry to the North East – Were there any other jobs? How did all of the family contribute to the mining industry? **Historical Enquiry** • Did Mining improve our area? Small independent enquiry using pre-selected primary and secondary sources • Begin to make independent decisions and use evidence to justify thoughts and opinions. • Begin to consider how reliable different sources are and justify their use. **Using Sources as Evidence** • Identify primary and secondary sources – artefacts, books, museums etc. – and begin to form opinions based on the evidence

Key Skills, Knowledge and Understanding

Year 3 Spring	***How much more advanced is iron than stone?*** Stone Age to the Iron Age, including: Hunter gatherers, Early farming, Bronze Age, and Iron Age • **Achievements (scientific and cultural)** Ability to shape and use metals. Discovery of fire. Invention of the wheel. • **Housing and architecture** Caves – living conditions Cave paintings telling stories. • **Society (politics and class)** Hunter gatherers to farmers**.** • **Food Farming and Trade** Hunter gatherers to farmers**.** **Constructing the Past** • Build a coherent knowledge The Stone, Bronze and Iron ages by comparison throughout most lessons (including comparison with each other, with now and with eras previously studied), focusing on: ○ achievements, (metal work, fire, the wheel) ○ housing, (caves, cave paintings) ○ society, (hunter gatherers to farmers, begins of permanent residences) ○ food, farming and trade, (move to agrarian life) ○ beliefs (pagan) **Sequencing the Past/Chronology**

	• Place Stone, Bronze and Iron Ages into a wider chronological context – in relation to now. (George Stephenson, Great Fire of London, WW1, Captain Cook, Miners, Grandparents) • Understand and use the terms BC (BCE) and AD (CE) • Sequence the key changes throughout the era, justifying how and why they know. **Continuity and Change** • Identify the significant developments and changes throughout the stone, bronze and iron ages (wheel, fire, farming techniques) **Cause and Effect** • Identify what caused the shift in hunter-gathering to farming – communicate the reasons for it. • Consider the impact on life – new learning about agriculture, domestication of animals, building permanent homes, social hierarchies, more abstract learning (language, writing, civilisation) etc. **Significance and Interpretation** • Identify why advancements in the Stone, Bronze and Iron Ages were significant to the development of Britain – tools, farming civilization etc • Identify why our interpretations of some time periods is difficult due to limited primary sources or written evidence – consider why it is harder to find evidence, the further back in time you go. How can we fill in the gaps? **Historical Enquiry** • Begin to make independent decisions and use evidence to justify thoughts and opinions. • Begin to consider how reliable different sources are and justify their use. **Using Sources as Evidence** • Identify primary and secondary sources – artefacts, books, internet etc. • Consider why sources are limited for the Stone, Bronze and Iron ages.

Key Skills, Knowledge and Understanding

Year 3 Summer	***Could you discover Tutankhamun's tomb?*** Achievements of early Civilizations - Ancient Egyptians • **Achievements (scientific and cultural)** Irrigation. Communication – hieroglyphs • **Housing and architecture** Pyramids and tombs. Construction techniques. Valley of the Kings. • **Society (politics and class)** Slaves and Pharaohs. Army only lower class. Upper class had powers and rights. • **Food Farming and Trade** Irrigation. Trade within and without the Egyptian empire. Growth of empire and end. • **Entertainment** Sports – especially swimming (importance of the Nile), board games, hunting, parties (jewellery and make up). • **Beliefs** God like pharaohs – all powerful. Polytheistic religion **Constructing the Past** • Build a coherent knowledge of Ancient Egypt throughout most lessons (including comparison with life in Britain at the time and life in Britain/Egypt today), focusing on: ○ achievements, (hieroglyphs, irrigation) ○ housing, (pyramids, tombs construction) ○ society, (slaves and pharaohs) ○ food, farming and trade, (irrigation, dependence on the Nile) ○ entertainment, (jewellery, parties, hunting, make up) ○ beliefs (Gods, pharaohs, polytheistic) • Understand that the Ancient Egyptian period ran for a long time, with different time periods. **Sequencing the Past/Chronology** • Place Ancient Egypt into a wider chronological context – in relation to now. (George Stephenson, Great Fire of London, WW1, Captain Cook, Miners, Grandparents, Stone Age) • Understand and use the terms BC (BCE) and AD (CE) • Develop an understanding of concurrence of civilisations around the world during these times (Stone to Iron Age & Ancient Egypt) • Consider the duration of each period and relate it to timelines. How does this compare to other periods studied? **Continuity and Change** • Identify and consider the changes that occurred throughout the period. (technology, why did they change? What period did they change in? How do the different periods compare? • Identify continuities throughout the period – religion, wealth disparity etc. **Cause and Effect**
	• Explore the significance of the Nile to life in Ancient Egypt. What was the effect of harnessing the flood plains and irrigation? Link to natural resource and humans from Geography. **Significance and Interpretation** • Identify the significance of religion to Ancient Egyptians. How did it affect their daily life? • Consider the significance of the pyramids as structures – 7 wonders etc. • Begin to make own interpretations of historical evidence – Carter's discovery of King Tut's tomb. What can we tell about Tutankhamun? **Historical Enquiry** • Investigate the Egyptian belief system by extracting and interpreting information from multiple sources. Could focus on tombs, pharaohs, afterlife, daily worship etc. **Using Sources as Evidence** • Consider why sources are limited for the Stone, Bronze and Iron ages and less so for Ancient Egypt. What does this tell us about the Ancient Egyptians?

Key Skills, Knowledge and Understanding

ICT

Year 3	**Programming** • Give a series of instructions to take a programmable object to a location. • Use degree turns in my instructions and programs. • Write programs to create simple animations and drawings. • Test, changes and fix errors in my instructions and programs. • Understand the importance of using simulations. • Explore the effect of different choices when using a variety of simulations. **Handling Data** • Understand what a record and field is. • Add records and fields into a prepared database. • Sort a database to answer simple questions. • Use a branching database to identify objects. • Create clearly labelled graphs and use them to present back my findings. **E-communication** • Send and reply to messages sent by a safe email partner (within school). • Open and save content within messages. • Be aware of how to keep safe when using e-communication. **Key Skills** • Use the spell checker to edit most spellings. • Improve my work by selecting appropriate tools to add emphasis and effect (e.g. centre, font size, font colour and B, U and I). • Understand the difference between cut and copy. • Use formatting such as bullet points, centre alignment, auto shapes and text boxes to organise my work. • Change page set up (portrait and landscape) and can use the print preview. • Create folders to organise content. **Multimedia Production** • Capture film or images select the ones I wish to use. • Use photo editing software to crop photos and add simple effects and filters. • Insert still and moving images into different programs. • Create pieces of work that show some awareness of an audience. **Using the internet** • Use search engines to find and images using a keyword. • Use 'Save picture as' to save an image to the computer and insert it into my work.

	• Decide what text to copy into my work. • Find relevant information by browsing. **E-safety** • Know that websites sometimes include pop-ups that take them away from the main site, including the use of advertising. • Understand that the internet contains fact, fiction and opinion and begin to distinguish between them. • Understand the need for rules to keep me safe when using technology of when online and can follow my own and the school's rules. • Understand the need to keep personal information and recognise that everything I put online can be seen and used by others and cannot be deleted. • Understand the need for caution when using an internet search and what to do if I find something bad. • Recognise that cyber bullying is unacceptable and the consequences of taking apart in it. • Know how to report an incident of cyber bullying. • Know the difference between online communication tools used in school and those used at home.

MUSIC

Year 3	**Performing** • Sing in tune with expression. • Control my voice when singing. • Play clear notes on instruments. **Composing** • Use different elements in my composition. • Create repeated patterns with different instruments. • Compose melodies and songs. • Compose simple melodies and tunes. **Appraising** • Improve my work; explaining how it has improved. • Use musical words (the elements of music) to describe a piece of music and compositions. • Use musical words to describe what they like and dislike. • Recognise the work of at least one famous composer. • Listen carefully and recognise high and low phrases.

Key Skills, Knowledge and Understanding

MFL

Year 3 & 4	**Listening & Responding** • Understand short passages made up of familiar language. • Understand instructions, messages and dialogues within short passages. • Identify and note the main points and give a personal response on a passage. **Speaking** • Have a short conversation saying 3-4 things. • Use short phrases to give a personal response. • Name and describe people, a place and an object. • Start to speak using a full sentence. **Reading & Responding** • Read and understand short texts using familiar language. • Identify and explain the main points in a short passage. • Read a passage independently. • Use a bilingual dictionary or glossary to look up new words. **Writing** • Write phrases from memory • Write 2-3 short sentences on <a familiar topic>. • Write what I like and dislike about <a familiar topic>.

ART

Year 3	**Drawing** • Show facial expressions in my drawings. • Use my sketches to produce a final piece of work. • Write an explanation of my sketch in notes. • Use different grades of pencil shade, to show different tones and texture. **Painting** • Predict with accuracy the colours that I mix. • Know where each of the primary and secondary colours sits on the colour wheel. • Create a background using a wash. • Use a range of brushes to create different effects. **Printing** • Make a printing block. • Make a 2colour print. **Textiles/ 3D** • Add onto my work to create texture and shape. • Use more than one type of stitch. • Use sewing to add detail to a piece of work. • Add texture to a piece of work. **Collage** • Cut very accurately. • Overlap materials. • Experiment using different colours. • Use montage. **Sketchbooks** • Use my sketch books to express feelings about a subject and to describe likes and dislikes. • Make notes in my sketch books about techniques used by artists. • Suggest improvements to my work by keeping notes in my sketch books. **Use of it** • Use IT programs to create a piece of work that includes my own work and that of others (using web). **Knowledge** • Compare the work of different artists. • Know how to identify techniques used by different artists. • Explore work from other cultures. • Explore work from other periods of time. • Understand the viewpoints of others by looking at images of people and understand how I are feeling and what the artist is trying to express in my work.

Key Skills, Knowledge and Understanding

DT

Year 3	**Developing, planning & communicating ideas** • Show that my design meets a range of requirements. • Put together a step-by-step plan which shows the order and also what equipment and tools I need. • Describe my design using an accurately labelled sketch and words. • Say how realistic my plan is. **Evaluating processes & products** • Explain what I changed which made my design even better **Working with tools, equipment, materials & components** • Use equipment and tools accurately. **Textiles** • Join textiles of different types in different ways. • Choose textiles both for my appearance and also qualities. • Think what the user would want when choosing textiles. • Think about how to make my product strong. • Devise a template. • Explain how to join things in a different way. **Electrical & mechanical components** • Select the most appropriate tools and techniques to use for a given task. • Use a simple circuit. • Use a number of components. **Use of materials** • Use the most appropriate materials. • Work accurately to make cuts and holes. • Join materials. **Mouldable materials** • Select the most appropriate materials. • Use a range of techniques to shape and mould. • Use finishing techniques.

Key Skills, Knowledge and Understanding

RE

Year 3	**Knowledge & Understanding of Religion** • Describe some of the beliefs and features of religion, recognising similarities and differences. • Identify the impact religion has on believers' lives. • Describe some forms of religious expression. • Explain what Christians believe about Jesus **Critical Thinking** • Express their views in response to religious materials. • Show some awareness of other people's views. • Ask important questions about religion and beliefs **Personal Reflection** • Reflect on their own feelings, ideas and values in relation to religious materials and beliefs

PSHCE

Year 3	**Me and My Relationships** • Accept the views of others and understand that we don't always agree with each other. • Recognise ways of helping others to resolve arguments or disputes. • Give ideas about how to be a good friend how to make up with a friend if we've fallen out. **Valuing Difference** • Give examples of different types of families. • Give examples of different community groups and what is good about having different groups. • Explain how different families and communities can experience prejudice and why this can happen (fear, ignorance, media-fuelled etc). • Explain ways that prejudice can be safely challenged. • Understand what tolerance and respect mean and how they can help everyone. • Give examples where respect and tolerance have helped to make our classroom a happier, safer place. **Keeping Myself Safe** • Give examples of risky situations. • Explain how to make a situation less risky or not risky at all. • Understand the risks of cigarettes and alcohol. • Understand why medicines can be helpful or harmful. • Explain why things other than drugs can be helpful and harmful to a person's health, and what can influence a person to take risks. • Understand about keeping personal details safe online and why this is important. • Explain why information online might not always be true **Rights and Responsibilities** • Give an example of a fact and of an opinion. • Describe ways of checking whether something is a fact or just an opinion. • Explain some of the ways that people online might try to trick people by presenting 'false facts' and say what I can do to keep myself safe from being tricked. • Explain how as I get older I start to take more responsibility for keeping myself safe and give an example of this. • Understand how to help the people who help me, and give examples. **Being my Best** • Explain what 'responsibility' means and give examples of things that relating to my health that I can take responsibility for. • Recognise a skill or talent that I've developed and the goal-setting that I've already done (or plan to do) in order to improve it. • Describe aspirations I have for when I'm older and give examples of the goals I need to set in order to achieve these. **Growing and Changing** • Describe what makes a positive relationship and things that make a negative relationship. • Know what is needed to make a new human being (egg and sperm) and who produces these. • Know what happens to the woman's body when the egg isn't fertilised, recognising that it is the lining of the womb that comes away. • Understand what 'body space' is and when it might be OK to go into someone's body space and when they can go into mine. • Identify when someone hasn't been invited into my body space and show how I can be assertive in asking them to leave it if I feel uncomfortable. • Identify unsafe secrets that make me feel uncomfortable and who I can talk to about it.

Key Skills, Knowledge and Understanding