

BLACK HORSE HILL JUNIOR SCHOOL – HISTORY LEARNING SEQUENCE

History - The Ancient Sumer



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
<p>Enquiry 1: What was Ancient Sumer? When did the Ancient Sumer live? Where was Ancient Sumer?</p>	<p>Key Knowledge: Ancient Sumer was an ancient civilisation. They existed from c. 5300 BC to c. 1940 BC. (Compare chronology to Ancient Britain) Through map work identify Mesopotamia (modern day Iraq) between the rivers Tigris and Euphrates.</p>
<p>Enquiry 2: How was Ancient Sumer organised?</p>	<p>Key Knowledge: Ancient Sumer was made up of several individual city-states that had their own god or goddess and ruler. The largest of Ancient Sumerian cities, Uruk, was home to between 40,000 and 80,000 people. Each city was surrounded by a large, defensive stone wall, with small farming villages outside them (compare to Iron Age hillforts)</p>
<p>Enquiry 3: What is a civilization? (compare to Ancient Britain during this period) What is the Ancient Sumer known for?</p>	<p>Key Knowledge: The Ancient Sumer are often regarded as the creators of modern civilisations. The Ancient Sumer were responsible for many innovations in areas such as language, architecture, mathematics and science, schools as a way to pass information between generations to keep society developing. They are credited with inventing the wheel and the earliest writing system.</p>
<p>Enquiry 4: How were the rivers Tigris and Euphrates important to the Ancient Sumer?</p>	<p>Key Knowledge: Ancient Sumer are also attributed with developing innovative farming methods using their knowledge of mathematics and engineering. They invented irrigation and learned how to control the flooding of the rivers Tigris and Euphrates to their benefit. Additionally, they even built working canals, a feat that no civilisation had achieved before them.</p>

BLACK HORSE HILL JUNIOR SCHOOL - ART LEARNING SEQUENCE

ART: ANDY GOLDSWORTHY UNIT



Learning Intention	What the children will know/ Essential knowledge
<p>1. To know who Andy Goldsworthy is, and what type of art he produces.</p>	<p>Andy Goldsworthy is a sculptor that is still alive and working today. That a sculptor makes sculptures (3D art objects.) He is a Land Artist. Land artists make their art with nature materials and in the natural world.</p>
<p>2. To explore the relationship between line, shape and space when drawing.</p>	<p>That Goldsworthy liked to experiment with and explore the relationship between line, shape and space. That when space interrupts a line it can still look as if it continues. That both line and space can be used to create shape.</p>
<p>3. To explore the relationship between line, shape and space by using a stencil (or person) WEATHER DEPENDENT</p>	<p>That Andy Goldsworthy has used his own body like a stencil to create a space he called a rain shadow. That stencils work by blocking and generating space that creates a shape. Know how to use themselves or stencils to successfully create shapes/rain shadows.</p>
<p>4. To explore how to create tones of colour whilst painting collaboratively and how to create texture using paint.</p>	<p>How to work collaboratively on a large-scale art project i.e. class river painting – teamwork. That adding white to a colour makes lighter tones of that colour. That using thick, overlapping paint can generate texture and that pouring paint onto a surface can add texture and change tones. That directionality of brush strokes can affect texture.</p>
<p>5. To print showing understanding of the basic process and to experiment with the use of colour, pattern and shape in their printed design</p>	<p>The difference between colour and tone. That Goldsworthy has experimented with both tone and colour in his art work. The process of successfully printing with a leaf and poster paint. How to print leaves, and overlap these painted prints, to create concentric printed circles of different tones and colours.</p>

<p>6. To make a 2D shape and a 3D model using small pieces of slate.</p>	<p>That Andy Goldsworthy has made sculptures out of slate. Pieces of slate can be arranged to form both 2D and 3D shapes as well as to generate line. That creating art takes time and patience and that land art is often ephemeral.</p>
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BLACK HORSE HILL JUNIOR SCHOOL - COMPUTING LEARNING SEQUENCE

COMPUTING: Code Studio Course C Lessons 11-16



Learning Intention	What the children will know/ Essential knowledge
<p><u>THE BIG EVENT</u> To know how to use events to allow greater flexibility when programming</p>	<p>Events are a good way to add flexibility to a pre-written algorithm.</p>
<p><u>BUILD A FLAPPY GAME</u> To create their own Flappy Bird game</p>	<p>How to write a simple algorithm around events to build their own Flappy Bird game. How to customize their game by changing the visual or the rules.</p>
<p><u>MINI-PROJECT: CHASE GAME</u> To create their own animated game.</p>	<p>How to write a simple algorithm around events to build their own animated game.</p>
<p><u>PICTURING DATA</u> To represent data using simple graphs.</p>	<p>How to collect data from a Play Lab project and visualise it using different graphs.</p>
<p><u>BINARY BRACELETS</u> To know how computers store information</p>	<p>That binary can be represented as two opposite variables (eg. On/off, 1/0, yes/no.) That binary is a how computers store information.</p>
<p><u>END OF COURSE PROJECT</u> To draw upon all their prior learning to design, develop and showcase a game.</p>	<p>How to combine the skills that they have learnt to design, develop and showcase a game of their choice.</p>

BLACK HORSE HILL JUNIOR SCHOOL - COMPUTING LEARNING SEQUENCE

COMPUTING: Desktop Publishing



Learning Intention	What the children will know/ Essential knowledge
<p><u>WORDS & PICTURES</u> To know what text and images are and how to use them effectively to communicate messages</p>	<p>The difference between text and images. That text and images can communicate messages clearly. The advantages and disadvantages of using text only, images only or a combination of both to communicate messages.</p>
<p><u>CAN YOU EDIT IT?</u> To alter and edit text size, font style and colour</p>	<p>How to change font style, size and colour for given purpose/effect. How to edit text using return, backspace and shift keys to move cursor, delete and insert punctuation respectively.</p>
<p><u>GREAT TEMPLATE!</u> To understand how to use templates, change orientation and insert place holders</p>	<p>What page orientation means (portrait and landscape) and how to change it. What placeholders are and why they are important. How to create a template for a particular purpose.</p>
<p><u>CAN YOU ADD CONTENT?</u> To copy and paste in content and to edit placed content.</p>	<p>How to select the best locations for their content. How to copy and paste text and images in to a previously made template to create a magazine cover. How to make changes to content after it has been inserted/added.</p>

BLACK HORSE HILL JUNIOR SCHOOL - COMPUTING LEARNING SEQUENCE

**COMPUTING: NCCE Programming B
(Events and actions in programs)**



Learning Intention	What the children will know/ Essential knowledge
<p><u>MOVING A SPRITE</u> To move characters using events. To analyse and improve an existing project.</p>	<p>The relationship between an event and an action. Which keys to select for the actions giving reasons for their choices. How to evaluate and improve a program.</p>
<p><u>MAZE MOVEMENT</u> To program a sprite to move in different directions making use of duplicate code To select a sprite style and size suitable for the background</p>	<p>How to select a character of a suitable size in a maze. How to program movement of a sprite in four directions: up, down, left and right. How to duplicate and modify existing code to make this directionality programming more efficient.</p>
<p><u>DRAWING LINES</u> To use extension blocks in Scratch (the pen extension) to draw lines</p>	<p>How to use a programming extensions How to use the pen down block to draw digital lines. How to use blocks to set up how their project is run.</p>
<p><u>ADDING FEATURES</u> To design features and use additional pen blocks to create and add them.</p>	<p>How to add additional features from a given set of blocks. How to use suitable keys to turn on these additional features. How to build sequences of commands to make their design work.</p>

BLACK HORSE HILL JUNIOR SCHOOL - MUSIC LEARNING SEQUENCE

MUSIC: Meadow Song Project



Learning Intention	What the children will know/ Essential knowledge
<p><u>SONG OF THE DEEP, DARK EARTH</u> To sing with expression. To explore using dynamics to create dramatic effect. To play untuned percussion instruments showing awareness of the dynamics and mood of the music.</p>	<p>That you can sing expressively just like you can read expressively to convey emotion and feeling. What rhythm is how it is different from pulse. That dynamics refer to changes in volume and that such changes can be used to create tension and drama in a performance. What the terms pianissimo (pp), piano (p), mezzo piano (mp), mezzo forte (mf), forte (f) and fortissimo (ff) mean and how these can be combined to form a crescendo (getting louder) and decrescendo/diminuendo (getting quieter.) How to play percussion instruments rhythmically, with awareness of dynamics, coming in and stopping at the right times.</p>
<p><u>RIDDLE SONG</u> To sing with clarity, delicacy and rhythmical accuracy To identify the structure of a song To move expressively in a way that is informed by the music</p>	<p>That good diction is important for clarity in singing. That you can alter the way you sing words or phrases for different effects e.g. delicacy, emphasis. That the words of a song follow the rhythm of the melody. That the structure of a song is how it is arranged e.g. verse, chorus, bridge. That movement to music should be in time to the pulse. That movements can be informed by the lyrics, melody and/or mood of the song.</p>
<p><u>SONG OF SUMMER</u> To sing showing awareness of appropriate phrasing. To listen with increasing attention to a piece of music. To create simple compositions that echo sounds from the natural world</p>	<p>That breathing in the right place is important to successful singing. How to listen to a piece of music with a particular focus (e.g. the instruments making a cuckoo sound, a grass hopper sound.) That the voice can be used to create a wide variety of vocal sounds that can imitate the sounds of animals. That these sounds can be combined to create a vocal soundscape.</p>

<p>using vocalised sounds, body sounds and percussion instruments.</p>	<p>That some instruments have timbres that make them more appropriate for imitating given animal sounds.</p> <p>That sounds can be made with the body and that this is known as body percussion.</p> <p>That vocalised sound, body percussion and percussion instruments can be combined effectively to create a meadow soundscape.</p> <p>That a composition can be written down so that everyone can see and follow their part.</p> <p>How to follow a graphical representation of a composition, starting and stopping playing at the right time, and maintaining their part whilst others play.</p>
<p><u>MARVELLOUS STORIES</u></p> <p>To understand that songs can convey messages.</p> <p>To create and use body percussion rhythms to accompany a song.</p> <p>To sing with increasing awareness of pitch.</p> <p>To sing in parts, maintaining their part.</p>	<p>That singing songs and focusing on the lyrics, helps us to understand things (e.g. that meadows and nature are important.)</p> <p>That rhythmical actions made in time with the music and informed by the lyrics can help us remember the words of a song.</p> <p>That pitch refers to changes in the highness and lowness of notes.</p> <p>That when we sing it is useful to listen to whether the notes are getting higher or lower and to try to follow this pattern.</p> <p>That singing in parts takes practice because we need to know our part really well so we maintain it when others are singing different parts at different times.</p>

BLACK HORSE HILL JUNIOR SCHOOL - DT LEARNING SEQUENCE

DT: Design a Bug House



Learning Intention	What the children will know/ Essential knowledge
To research habitats of a range of minibeasts	That different minibeasts like different conditions to live in e.g. dark, damp/dry, sunny. That different minibeasts prefer different features in their habitats e.g. dead leaves, stones, hollow twigs, pine cones
To evaluate a selection of bug homes and suggest improvements	That good designs are pleasing to look at and are functional (ie, able to meet the design brief) Identify good/bad features in these designs and suggest improvements.
To specify a design brief and design a product to fulfil this brief.	That a design brief states the function/purpose of the design and the user. How to use the design brief to inform their own design and chosen materials. How to draw a labelled diagram to communicate their design and explain their material selection.
To identify the materials and equipment needed to make their design To identify how they are going to make their design recording this process as a sequence of steps	That to make their design they will need to select both the necessary materials and equipment – make a list of both. That before they start to make a design it is important to plan the order of their design assembly – record the sequence of steps to follow to make their design.
To measure, mark out, cut, shape and assemble their components safely and accurately so that the bug house they make is fit for purpose	Be able to follow carefully and accurately the series of steps they specified to assemble their bug house. How to use a ruler to measure to the nearest cm and how to mark this out on materials effectively. How to use and carry scissors safely. (If using a hacksaw – how to use it safely.) How to assemble, join and combine their materials in order to make their bug house (eg. How to tie a simple knot in string. How to use sellotape to hold things together. If necessary - how to use a glue gun safely under supervision.) That sometimes problems arise with designs when they are being assembled and that changes to designs may be necessary to improve them, or enable them to function.

Year 3 Summer Term

<p>To think about their ideas as they progress through assembly and be willing to make necessary changes</p>	
<p>To evaluate their design against their original design brief.</p>	<p>That once products are assembled, it is important to reflect on how well it meets its intended purpose (the design brief.) Identify things that worked well and the things they would improve about their design or make, if they were building their bug house again.</p>

BLACK HORSE HILL JUNIOR SCHOOL - RE LEARNING SEQUENCE

RE: Hinduism – How can Brahman be everywhere and in everything?



Learning Intention	What the children will know/ Essential knowledge
<p><u>ENGAGEMENT</u> To understand that although they are one person, they mean different things to different people</p>	<p>That although there is only one of them, they are different things to different people e.g. son/daughter, friend, pupil, football team player, Brownie etc.</p>
<p><u>INVESTIGATION 1</u> To understand the Hindus believe in Brahman as the supreme spirit. To know that Hindus consider Brahman can exist in many different forms/deities. To understand that Hindus believe that Brahman exists in every living thing.</p>	<p>That Hindus believe Brahman is the Supreme Spirit but can exist in many different forms. He is different things to different people.</p> <p>That Hinduism is a polytheistic religion – they have many gods/goddesses each with different strengths/powers.</p> <p>That Hindus believe all living things should be treated with respect because they all contain a divine part (part of Brahman.)</p>
<p><u>INVESTIGATION 2</u> To know that the gods of the tri-murti are the most important deities to Hindus. To understand how and where Hindus worship</p>	<p>That the tri-murti are the three most important gods for Hindus. That the tri-murti are: Brahma (creator) Vishnu (preserver) and Shiva (destroyer) That Hindus worship different gods/goddesses as a family in the home and at different times of need at temples. That there is a Hindu act of worship called Puja.</p>
<p><u>INVESTIGATION 3</u></p>	<p>That Hindus believe Brahman exists in every living thing.</p>

<p>To understand that Hindus believe that Brahman exists in every living thing. To consider how this belief might affect the lives of Hindus</p>	<p>That Hindus believe that everyone and every creature is therefore important and should be treated with respect. That believing in god/goddesses can make a difference to the way Hindus live.</p>
<p><u>EVALUATION</u> To reflect upon how Brahman can be everywhere and in everything. To form their own ideas about this belief.</p>	<p>That Hindus believe Brahman exists in every living thing and give reasons why they believe that. Give their own ideas about a supreme spirit could exist in everyone and every living thing. Give reasons for their ideas.</p>
<p><u>EXPRESSION</u> To compare Christian belief in God to Hindu belief in Brahman To design their own god/goddess with its own special attributes.</p>	<p>That Christians believe that God created the world and Hindus believe Brahman is everything in the world. That Christians worship just one God but Hindus worship many different forms of a Supreme Spirit Brahman.</p>

BLACK HORSE HILL JUNIOR SCHOOL - RE LEARNING SEQUENCE

RE: Hinduism – Would visiting the River Ganges feel special to a non-Hindu?



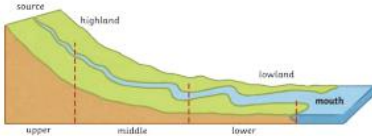
Learning Intention	What the children will know/ Essential knowledge
<p><u>ENGAGEMENT</u> To know why water is important To consider the uses of water To know where rivers start and end</p>	<p>That all living things need water to survive. That water has multiple uses e.g. drinking, cooking, cleaning, washing. That a river starts at a source (in the mountains) and ends at it's mouth (in the sea.)</p>
<p><u>INVESTIGATION 1</u> To know that Hindus believe the River Ganges is sacred.</p> <p>To identify the source and end of the River Ganges.</p>	<p>That Hindus believe the River Ganges is the Goddess Ganga who has the power to purify. That Hindus bathe in the river because they believe it will wash away their sin. That they throw the ashes of their deceased loved ones in the river because they believe this will enable them to be transported to heaven. That Hindus are baptised in the River Ganges. The River Ganges source is in the Himilayan Mountains and its mouth is in the Bay of Bengal. (Label these on a map.)</p>
<p><u>INVESTIGATION 2</u> That many Hindus make a pilgrimage to the River Ganges for a festival called Kumbh Mela To understand that Hindus believe Brahman is in the water as water is seen as a life source.</p>	<p>That Hindus travel to bathe in the river to cleanse themselves of sin and because to help them be a good person.</p> <p>That Hindus believe that water is divine (contains Brahman). It is therefore very important to Hindus and every Hindu tries to visit the River Ganges to bathe in it at least once in their lifetime.</p>

<p><u>INVESTIGATION 3</u></p> <p>To know that both Hindus and non-Hindus visit the River Ganges To understand the difference between a tourist and a pilgrim.</p>	<p>That the River Ganges is a popular tourist attraction in India that is visited by both Hindus and non-Hindus. That a tourist is a person who is travelling and visiting a place for pleasure whereas a pilgrim is a person who travels to a sacred place for religious reasons.</p>
<p><u>EVALUATION</u></p> <p>To identify reasons why a visit to the River Ganges might be special for both Hindus and non-Hindus To reflect upon whether they would like to visit the River Ganges</p>	<p>That a trip to the River Ganges would be special to Hindus for religious reasons – to wash away sin, to transport loved ones to heaven, to be baptised. That a trip to the River Ganges would be special to non-Hindus for other reasons – to experience a different culture/belief system, to see somewhere new. Express their own views on visiting the River Ganges.</p>
<p><u>EXPRESSION</u></p> <p>To express their own ideas of the Goddess Ganga and how she came to Earth to form the River Ganges</p>	<p>That the River Ganges was formed when the Hindu Goddess Ganga came to Earth. Represent their own ideas of how this happened through creating a picture.</p>

BLACK HORSE HILL JUNIOR SCHOOL – GEOGRAPHY LEARNING SEQUENCE

GEOGRAPHY - RIVERS & ESTUARIES



Enquiry/ Learning Intention	What the children will know/ Essential knowledge																				
<p>Enquiry 1: What is a river? Where does a river begin its journey? Where does a river end its journey?</p>	<p>Key Knowledge: A river is a body of water that flows from high ground to low ground due to gravity. A river begins its journey at a source: as rain or snow (precipitation), a natural spring, a glacier or lake high in the mountains. If there are several sources, it is considered to be the highest point. However, the source of a river can also be bogland. A river ends its journey when it meets the sea at the river’s mouth or an estuary. A river may also end its journey by emptying into a lake or another river at a confluence.</p>																				
<p>Enquiry 2: Structure - What are the features of a River?</p>	<p>Key Knowledge: Geographers divide rivers into three courses: upper course, middle course and lower course. How to identify and describe the following features: source, valley, channel, basin, tributary, waterfall, stream, meander, oxbow lake, floodplain, bank, mouth, current, estuary.</p>																				
<p>Enquiry 3: How does a river change on its journey?</p>	<p>Key Knowledge: The way a river flows and its features are different in each of its three courses.</p>  <table border="1" data-bbox="678 1145 1048 1385"> <thead> <tr> <th></th> <th>Upper Course</th> <th>Middle Course</th> <th>Lower Course</th> </tr> </thead> <tbody> <tr> <td>Gradient</td> <td>Steep gradient</td> <td>more gentle gradient</td> <td>Flat gradient</td> </tr> <tr> <td>Velocity</td> <td>Low velocity</td> <td>Faster velocity</td> <td>Fastest velocity</td> </tr> <tr> <td>Features</td> <td>Waterfalls, gorges, and rapids</td> <td>Meanders, Ox bow lakes, floodplains</td> <td>Floodplains, deltas, estuaries</td> </tr> <tr> <td>Channel</td> <td>Narrow and shallow channel</td> <td>Wider and deeper channel</td> <td>Widest and deepest channel</td> </tr> </tbody> </table>		Upper Course	Middle Course	Lower Course	Gradient	Steep gradient	more gentle gradient	Flat gradient	Velocity	Low velocity	Faster velocity	Fastest velocity	Features	Waterfalls, gorges, and rapids	Meanders, Ox bow lakes, floodplains	Floodplains, deltas, estuaries	Channel	Narrow and shallow channel	Wider and deeper channel	Widest and deepest channel
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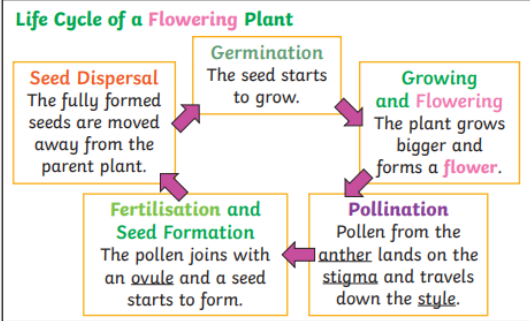
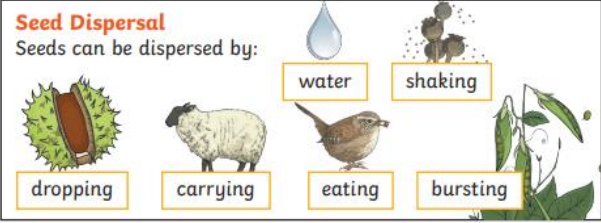
<p>Enquiry 4: Where do rivers occur? What are the World's most famous rivers?</p>	<p>Key Knowledge: Rivers occur all over the world and have played a huge role in shaping the Earth's landscape. Through investigating digital maps, atlases and maps, locate of the following rivers: Thames, Amazon, Nile, Ganges, Mississippi, Yangtze, Murray, Volga. Key facts and figures about the above rivers.</p>
<p>Enquiry 5: What and where are the nearest rivers in our locality? Where is the source and the end of the River Mersey? Where is the source and the end of the River Dee?</p>	<p>Key Knowledge: Use maps and digital maps to locate the Wirral peninsula, River Mersey, River Dee, Liverpool, North Wales and the Irish Sea. River Mersey has two sources: 1. River Tame (West Yorkshire) and 2. at the confluence of the River's Tame and Goyt, Stockport, Manchester (accepted source. It empties into Liverpool Bay on the Irish Sea. Source of River Dee is county on the slopes of Dduallt Snowdonia National Park, Gwynedd in North Wales. The River Dee forms the Dee Estuary and empties into the Irish Sea at Hilbre Island.</p>
<p>Enquiry 6: Human Geography How have humans shaped and used the River Mersey? What is a canal?</p>	<p>Key Knowledge: Understand that humans changed the course of the River Mersey to create the Manchester Ship Canal to transport goods between Liverpool and Manchester more efficiently. Follow the course of the river Mersey to identify industrialisation. Mersey tunnels, bridges, docks and ferries, city of Liverpool. Canals are artificial channels of water used for shipping, transporting goods, irrigation and leisure. Canals can shorten the course of a river and make it more navigable and allow faster transportation.</p>
<p>Enquiry 7: Physical Geography What is the course of the River Dee?</p>	<p>Key knowledge: Use digital mapping to identify and follow the course of the River Dee from source to mouth. The River Dee (Welsh Afon Dyfrdwy) is approximately 70 miles (110 km) long. Some of the features of the River Dee: Bala Lake, Horseshoe Falls, Pontcysyllte Aqueduct, Cheshire Plains, weir in Chester, canalised section, Parkgate Marsh, Dee Estuary, Hilbre Island, Irish Sea.</p>

<p>Enquiry 8: What is an estuary? Why are estuaries important to wildlife?</p>	<p>Key Knowledge: An estuary is an area where fresh water from a river meets the salt water of the sea/ocean forming a transition zone (ecotone - where two habitats meet). Where freshwater and saltwater combine the water becomes brackish (slightly salty). Ecotones such as estuaries are vital habitats and support an abundance of animal and plant life. Through fieldwork, understand the variety of wildlife the Dee Estuary supports and its significance as an important ecological site.</p>
<p>Enquiry 9: Fieldwork What can we find out about the Dee Estuary from through fieldwork?</p>	<p>Through fieldwork identify:</p> <ul style="list-style-type: none">- features of human geography evident in and around the Dee Estuary.- features of physical geography in and around the Dee Estuary.- the variety of animal, bird, marine and plant life the Dee Estuary supports.
<p>Enquiry 10: (Linked to English) What is water pollution? How are rivers under threat? How can we persuade people to look after rivers?</p>	<p>Key Knowledge: Water pollution is the process by which sources of water such as lakes, rivers and oceans become contaminated, usually as a result of human activity. It is a danger to humans, animal and plant life. There are four main causes of water pollution: Fertilisers and pesticides, industrial waste, oil spillages, dumping waste. How the above endangers rivers and waterways. Use the knowledge gained to write a letter to the local MP persuading them to protect our rivers and waterways.</p>

BLACK HORSE HILL JUNIOR SCHOOL – SCIENCE LEARNING SEQUENCE
SCIENCE - PLANTS



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
<p>Enquiry 1: What is a plant? Are all plants the same?</p>	<p>Key Knowledge: Plants are living things that: grow, move, are sensitive to change, respire, excrete and reproduce. However, plants differ from other living organisms as they make their own food (photosynthesis). Through observation, realise there exists a huge variety of plant life. Identify what is different and what is the same.</p>
<p>Enquiry 2: Structure - What are the parts of a plant?</p>	<p>Key Knowledge: Identify and name the main structures of plants: roots, stem, leaves and flower.</p>
<p>Enquiry 3: What is the function of each part of a plant?</p>	<p>Key Knowledge: Each part of a plant has a specific function: roots - anchor the plant into the ground and absorb water and nutrients from the soil. stem (trunk) - holds the plant up (supports), carries water and nutrients from the soil to the leaves. leaves - make food for the plant using sunlight and carbon dioxide from the air. flower - make seeds to grow into new plants. Petals attract pollinators to the plant.</p>
<p>Enquiry 4: What do plants need to live and for healthy growth?</p>	<p>Key Knowledge: Through investigation, conclude plants need water, light, air, nutrients from the soil and room to grow. Different plants vary in how much of these things they need. For example, cacti can survive in areas with little water, whereas water lilies need to live in water.</p>
<p>Enquiry 5: How is water transported to each part of a plant?</p>	<p>Key Knowledge: The process of how Water Moves through a Plant: 1. The roots absorb water from the soil. 2. The stem transports water to the leaves. 3. Water evaporates from the leaves. 4. This evaporation causes more water to be 'sucked up' the stem.</p>

<p>Enquiry 6: Why do plants have flowers? What is pollination?</p>	<p>Key knowledge: The flower is responsible for reproduction - the production of new seeds. Seeds begin to grow once a flower has been pollinated. The role insects play in cross pollination.</p>
<p>Enquiry 7: How do new seeds form?</p>	<p>Key Knowledge: The life-cycle of a plant.</p>  <p>The diagram illustrates the life cycle of a flowering plant in five stages:</p> <ul style="list-style-type: none"> Seed Dispersal: The fully formed seeds are moved away from the parent plant. Germination: The seed starts to grow. Growing and Flowering: The plant grows bigger and forms a flower. Pollination: Pollen from the anther lands on the stigma and travels down the style. Fertilisation and Seed Formation: The pollen joins with an ovule and a seed starts to form.
<p>Enquiry 8: How do seeds find somewhere to grow?</p>	<p>Key Knowledge: How seeds are dispersed in different way:</p>  <p>Seeds can be dispersed by:</p> <ul style="list-style-type: none"> water shaking dropping carrying eating bursting