Whole school Geography fieldwork curriculum

'Fieldwork is the glue that binds geography together'

Fieldwork intent:

Our aim is for our children to undertake fieldwork which further develops their sense of place in the world: to have a knowledge about where they live and the surrounding areas. We want our geographers to leave Horn's Mill with a strong sense of their locality and where they belong in the world.

The enquiry-led fieldwork opportunities that we provide will inspire our children to develop a curiosity and fascination about the world and its people. Through memorable real-life learning activities, the fieldwork children will undertake at Horn's Mill will help build the geographical knowledge essential for understanding the geographical processes that shape our environment. We aim to empower children through these authentic learning experiences, which offer real purposes, real audiences, and genuine outcomes in the real world.

Alongside high school experts and their expectations of young geographers, we have developed fieldwork opportunities that begin with the understanding of our immediate environment: our school grounds, before extending into our local community and beyond. Progression is mapped out across year groups, to ensure that our enquiry-based approach is sequential and skills are developed year on year.

EYFS Framework: Understanding the World

People, Culture and Communities • Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps The Natural World • Explore the natural world around them, making observations and drawing pictures of animals and plants.	*What are our favourite places around school?* Taking a walk around the school grounds, EYFS will explore their special places. Use 'special places in the school grounds activity' saved on server. They will photograph their special place and a class book will be created. At the end of the year, EYFS will reflect and think of memories that have happened throughout their school year around the school grounds. Using sticky notes, they will take a walk around school, adding memories to their special places, e.g. 'Here I won the sack race', etc. Back in the classroom, look at an aerial map of the school grounds. Can they locate the places you visited around school? Draw a simple map of the school grounds together. Using images taken over the year of 'special memories', place these images on the simple map in the location around school that they happened. Using discussions around weather, EYFS will develop their knowledge of physical geography and different types of weather including: wind, rain, snow and sun through stories and observations of their environment. They will experience weather first-hand throughout the seasons. Use fieldwork activities in Primary Geography: Local Fieldwork pages 14-15 (saved on server).

KS1 Geographical Skills and Fieldwork

• use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage	**Year 1** **Fieldwork 1: The school grounds** *Enquiry question: What is my school like?* Take photos of a school teddy in different places in the classroom. Show photos and ask them to go to that place it shows. Get them to describe the location where the photo was taken. Encourage the use of precise, locational language. In groups, go outside and explain that partners will take turns to hide the teddy somewhere on the school grounds. The challenge of the rest of the class is to find it. The partners that have hidden the teddy must provide oral or written descriptions of the teddy's location. This is repeated as different

• use simple compass directions (north, south, east and west) and locational and directional language [for example, near and far, left and right], to describe the location of features and routes on a map • use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key	partners hide the teddy in different places. Once everyone has had a go, back in the classroom invite children to look at a large-scale map of the school grounds and identify all the places the teddy hid. As a follow up, if children took pictures of where Teddy was found, they could add pictures onto a floor map of the school grounds. **Fieldwork 2: The local area: route to school** *Enquiry question: What is my local area like?* Ask children to visualise their route to school and discuss what they see on their journey - add in directional language. Show photos of the local area and discuss whether they are near or far; sort the photos according to this criteria. Organise a trip to the local shops or library. Show the route that they will walk on NLS maps. Discuss what they might see on their journey. Have a printed map out for when children walk and they can note down what they do see along the route - think about physical and human features and take pictures of these along your route. Do they recognise any landmarks they discussed? Back in class sort the images into physical and human features. Have a large aerial map of their journey to annotate on as a class. Add on the photographs and use simple compass directions to discuss the features in relation to one another. Children could then create their own sketch maps of their journey and add in some of the features. You may wish to develop a key together for each of the features. Discuss which are their favourite places on their route and discuss what they think about their local area. **Key vocabulary: near, far, left, right, journey, travel, globe, atlas, country, symbol, bird's eye view** **Year 2** **Fieldwork 1: The school grounds** *Enquiry question: Where would be a good hiding place for the troll around school?* (This links with our pathways unit). Using 'Troll Swap', collect data about human and physical features in the school environment that would make good hiding places. Go on a walk and make a list of the features in the school grounds. Using an aerial photograph as a basis, create a map of the school grounds with a simple key. Use the map to plan routes for the troll and to identify key hiding places. **Fieldwork 2: The local area: local playground/park** *Enquiry question: Where can we play in Helsby?* Use NLS maps to explore the local area and plan a route for walking to the local park (this extends from their learning in Y1). Look at the route together and show them on the map; if they are familiar with the area, you may wish for them to discuss alternative routes that you could go. Think about which would be the safest route and where you will all cross roads, etc. Discuss human and physical features that they might see on the way. Print off these maps for children to have on clip boards. Get them to annotate places they pass which offer good spaces to play and take photographs. At the park, encourage children to think about how they feel about the play facilities: which things do they like most or least? How could the play area be improved? Back in the classroom, look at a large-scale plan of the route and park together (or OS map). Stick on photos of their route and annotate the different play spaces they spotted with labels. Collate data about their favourite piece of equipment at the park and add this information on to the map. This could be by adding small smiley faces to represent each child next to the name of the equipment. Discuss where they think are the best spaces to play in our local area.

	Fieldwork 3: Unfamiliar area (Further fieldwork opportunity if children go on a residential to develop their sense of place) Prepare for this fieldwork opportunity by taking photographs of details that children will see whilst on their residential (doorways, flowerbeds, notices, markings, etc) Print and laminate these photos. Challenge pupils, in pairs or small groups, to find the features shown in the photos. When they have completed this, look together at a large scale plan and mark the location of the different features. Back in school they could create their own features hunt for the school grounds and have a go at creating their own basic maps of the school grounds with the location of their features. They would use a key for each of the features on their maps. **Key vocabulary: North, South, East, West, symbol, key, aerial view, aerial photograph, plan, map, directions, route, location, address, plan, semi-detached, terrace, factory**
KS2 Geographical Skills and Fieldwork	
• use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied • use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world • use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies	**Year 3** **Fieldwork 1: The local area: school grounds** Potential enquiry questions: Does vegetation vary around the school grounds? Where is the best location in school for varied plant life? Activity: As part of Science learning about plants, take part in a plant life enquiry around the school grounds. Choose several sites around school where children can find different plant species. Show children where the sites are located using a map of the school grounds. Add in 4 figure grid references and use these to locate the sites. Use a quadrat (a large square with sections: you may choose one with only four sections) and choose 4 sites across school to collect this data from. Drop the quadrat in this area and identify how many different plant species there are. You may wish to use a simple plant identifier. Use findings to consider why certain sites had more plant life. Resources needed: Quadrat, School map with 4-figure grid references labelled and sites identified, simple school map with sites noted (sketch map or OS), resources for recording data, plant identifier Data collected: The types of plant life at each site Present data: A bar chart for each site showing the different plants found in the quadrat. These could then be cut out and put on to a map of the school grounds in the location of each site (this is a location bar graph). **Fieldwork 2: A river enquiry** Potential enquiry questions: How does the shape of a rock change in a river? (the further downstream you go?) How does the river affect/change rocks? Activity: Take part in a river enquiry linked to learning on rocks. Visit a river where children can get in to collect a certain amount of rocks from several different sites (3 sites would work well). Each site moving further downstream. Sort the rocks at the site using the 'roundness scale' from 1-6. They will record this data at each site. Use findings to consider what has happened to the rocks as you have moved further downstream - this could be created as whole class if required. Resources needed: Roundness scale and recording equipment (paper, pens, clip board, etc) Data collected: The types of rocks found at each site. Present data: A divided bar chart for the 3 sites based on the roundness of rocks data. **Key vocabulary: Data, roundness, speed/velocity, downstream, scale, compass directions, symbol, key, aerial view, aerial photograph, plan, map, directions, route, relationship, scale, sketch, fieldwork, downstream, land use, quadrat, four-figure grid reference**

Year 4

Potential enquiry question: How busy is our local highstreet?

Fieldwork 1: The local area: shops (Frodsham high street would be ideal for this) *Helsby High have mini buses that could be used.*

Activity: Walk around the local high street and fill in a blank land use map with businesses/shops that are there (this could be just from a straight section of the high street). Split the children into groups and give them a shop to stand outside to count footfall and get people to complete surveys. (The businesses will need to be asked permission beforehand). Use the findings to discuss how busy the high street is and which were the busiest shops. If time allowed, this could be repeated with the shops in Helsby/other village shops and compared.

Resources needed: Blank land use map of Frodsham high street, questionnaires/surveys (with questions about shopping habits/visiting times, etc), paper to tally or a tally counter/clicker for footfall.

Data collected: What shops there are, how many people visit during a period of time and how often people visit.

Present data: Using the filled land use map, create a coloured scale/key for footfall traffic and colour the different shops based on their footfall.

Fieldwork 2: The local area: school grounds

Potential enquiry question: Which areas around school are best for water filtration?

Activity: Take part in an infiltration enquiry linked to learning around the water cycle. Choose several sites around school to measure how much water seeps into the ground out of an infiltrometer (large tube with no top or bottom). Take the measurements after 2 minutes and record findings. Use findings to consider why some places around school let more water filtrate into the ground. Following on from 4-figure grid references in Y3, use a map of the school grounds with grid references on to show the children where the sites are that they will be carrying out their infiltration enquiry.

Resources needed: Timers, infiltrometer (from geopacks)

Data collected: The amount of water that has left the infiltrometer in 2 minutes.

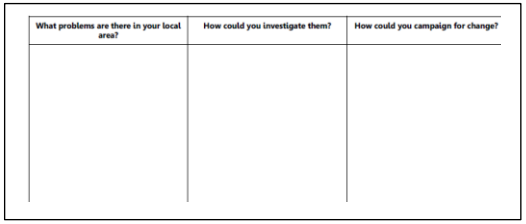
Present data: Bar chart to show the amount of water filtrated and from which site.

Key vocabulary: 8 cardinal points, relationship, scale, sketch, fieldwork, Ordinance Survey Map (OS), digital map, grid reference, questionnaire, survey, data, infiltration

Year 5

Potential enquiry questions: What are the issues in our local area and how can we help?

Fieldwork 1: The local area: areas within reasonable walking distance



Activity: A pupil-led investigation into a real-life current issue in their local area. Initially ask children to speak to families at home about any issues they have with their local area (e.g. dog fouling, littering, not enough seating, etc) - they could even go out to speak to staff members and school neighbours. After discussions, complete 'tackling local issues' table (see image) so that you can begin to plan an investigation. Choose an issue to focus on and plan how you will collect data, how you will collect different viewpoints and what they can do to try and solve the issue. (See page 25 of local fieldwork book)

Fieldwork 2: A river

Potential enquiry question: Does the speed of the water in the channel increase downstream?

Activity: An enquiry into measuring the speed of water in the channel. Locate 3 points in a river that children can get in and measure the speed of the water. This could be by having a starting point and measuring the amount of time that a floating object (e.g. duck) moves a certain distance, or they could get in and use a flow meter (which Helsby High have) to measure the speed of the water in that specific place. Groups would record the speed at 3 different points of the river. Use results to summarise findings and to answer the enquiry question.

Resources needed: Floating object or flow meters, timer, recording stationery

Data collected: The speed the water flows at 3 separate sites on a river (moving downstream)

Present data: Bar chart to show the 3 locations and speed of water.

Key vocabulary: 8 cardinal points, environmental issue, responsibility, recycle, sustainability, Ordinance Survey Map (OS), digital map, questionnaire, survey, data, downstream, six-figure grid reference, grid squares, analysis of data

Year 6

Potential enquiry question: What are local views on the wind farm?

Fieldwork 1: The local area: Frodsham wind farm

Activity: As part of Science learning around electricity and opportunities for discussions about renewable energies, contact the Frodsham wind farm to be shown around the site and be told about how they produce electricity and where it goes to. Whilst there, complete a sketch map of the area. Back in class, create a questionnaire to get opinions about the wind farm. Use an emotions scale to give the adjectives a numerical value for data collecting, e.g. have a scale between 2 opposite adjectives such as 'horrible and beautiful'. Take a sample of answers from people in the local community from various ages.

Resources needed: Resources for drawing sketch maps, questionnaires.

Data collected: Sketch map of wind farm, local opinions about the wind farm, also potential to collect age specific responses

Present data: Using the data, create a divided bar chart to show opinions of the windfarm. This could then be stuck on the sketch map. Several bars could be created if responses were broken down into age brackets.

Numbers of responses could be turned into percentages from Maths fraction and percentage teaching.

Fieldwork 2: The local area: Helsby Quarry and surrounding areas

Potential enquiry questions: How does land use affect flooding? How does land use affect water filtration?

Activity: Following on from earlier fieldwork in Year 3 and understanding that water is infiltrated into the ground, complete a second infiltration enquiry with a focus on using this data to discuss why some areas may hold water/flood easier. Choose several sites around the quarry/nearby streets to measure how much water seeps into the ground out of an infiltrometer (large tube with no top or bottom). Take 5 sets of measurements, 2 minutes apart from each (10 minutes in total), and record findings. Use the findings to focus on each site and discuss what might happen at times of heavy rain. They will also use the data to explain which site passed water through best and why this could be the case - thinking about how this land is used.

Resources needed: Timers, infiltrometer (from geopacks), OS maps with sites located (look at this together before fieldwork and make predictions about which areas may not allow water to pass through quickly).

Data collected: The amount of water that has left each infiltrometer in 10 minutes (at 2 minute intervals)

	Present data: Create scatter graphs for each site showing the amount of water left and the time at site (some may have escaped completely before the 10 minutes). You could use an aerial map of the location and stick on the scatter graphs at the various sites. **Key vocabulary:** analysis of data, quarry, renewable energy, sustainability, natural resources, climate change, geographical information systems (GIS), sketch map, infiltration, enquiry

End points in our Fieldwork curriculum

All fieldwork opportunities provided incorporate data collection and children will complete an end point activity demonstrating their evaluation of this data. During these end point activities, we expect children to be able to articulate in verbal and/or written form the key vocabulary in red on our curriculum document.