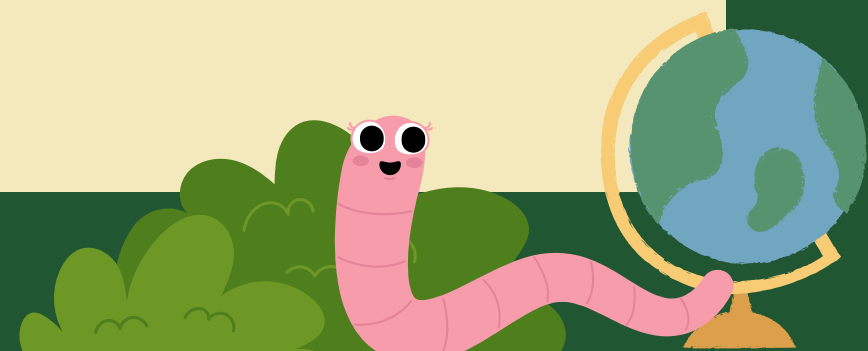# NORTHWOOD
PRIMARY SCHOOL

Whole School Geography Project

Growing Success by Putting Fieldwork into Action

Growing Success by Putting Fieldwork into Action

Fieldwork is the gathering (collecting) of information about something <u>in a real environment.</u>

Each year group will be given an area on the school grounds in order to answer the enquiry question:
<u>What can we find in our school grounds?</u>

Data collection and Presentation	Location	Classroom	In the Field	Resources
EY/R: Sorting Circles	Grassed area directly outside EY/R classroom.	Discuss expectations regarding behaviour outside	Children to work in groups of 4.	• Clipboard or whiteboard for each child.
Y1: Pictograph (May need a key to show how much 1 picture is worth.)	Grass in bottom right corner outside EY/R (squared fenced off area) + orchard.	KS1 – 1m length of string pre-cut for children (4 per group).	Record everything inside their quadrant – plants (specify e.g. daisy, dandelion etc.), minibeasts (specify), fallen leaves, litter, feathers, twigs etc.	• String for quadrants.
Y2: Block Diagram (May need a key to show how much 1 block is worth.)	Grassed area outside EY/R between hills and bottom right fenced off area – to the left of the shed.	KS2 – Children measure and cut 4 x 1m lengths of string (4 per group).		• Meter rulers to measure string.
Y3: Distribution Table (Can also present data in a block diagram or bar chart.)	Hills to the right of school main entrance.		Record data using method stated below.	• Magnifying glasses.
Y4: Vertical Bar Chart/Graph Also called a column chart. (With a gap between each bar.)	Grassed area between outdoor classroom and MUGA.			• Field guide to help with identification of species.
Y5: Horizontal Bar Chart (With a gap between each bar.)	Grassed area to the right of the MUGA and up to the Trim Trail (not the fake grass).			
Y6: Pie Charts	Grassed area between the park and 'wildlife garden'.			

- Children create their own quadrant based on given dimensions. Talk to children about how we can accurately measure and produce the expected quadrant in terms of area. **Alternatively, the adults will set out and label the quadrants for the children. The children will use their developing map reading skills to find their allocated quadrant (labelled A, B, C etc.).**
- Ask children if there is any other equipment which may be useful for this task. You will need whiteboard to act as a clipboard.
- EY/R – map out 'quadrants' with hoops.
- KS1 – map out quadrant with sticks/natural resources if possible (may have to use pre-cut string if not enough sticks).
- KS2 – map out quadrant with string – children to measure and cut the string beforehand.

- Adults to plot quadrants in given areas prior to fieldwork lesson to ensure they are carefully placed (make sure there are objects inside each quadrant for the children to see).
- Route of journey from school door to designated area to be drawn on map for children to follow and find their quadrant.
- Children to plot their quadrant on their map of the school (Digimap).
- Yr 6 to discuss map scale and then calculate the size their quadrant would need to be drawn to be accurate.
- KS1 children to be provided with a template for recording their data outside (table with pictures to tick each time they count an object in their quadrant?)
- KS2 children to choose their own way of recording their data outside. **Once back in class, discuss the ways the children collected their data. Which method was the best and why?**
- Teacher then to collate all groups' data on the board and discuss findings.
- Each child to present their data using the method in the table above (after a demonstration of expectations and working out what scale to use up the side). KS2 discuss different ways the data could be presented first.

Questions to discuss after data collection and presentation

- What do we have the most of in our school grounds? Why might this be?
- What do we not have much of and why? (Maybe not many minibeasts seen – why is this? Dry ground, lack of shelter/darker, damp places, noisy feet, lack of flowers to attract bees etc.)
- What do we want more of in our grounds and why?
- What do we want less of and what could we do about it? (litter)

Ensure photographs are taken of the whole process. Work to then be displayed in Big Books. Individual maps and charts can be put into children's geography books.

Work completed across classes will be shown during a whole school assembly to share findings.

Writing opportunity – Write a letter to Mrs Beach to request how we would like our school grounds to change. Why and what could be done about this?

Key Questions/Learning Objectives

- **Why do geographers do fieldwork?** To find out something specific about a particular environment. Geological fieldwork helps geographers generate new ideas, while providing a setting for discussion and allowing the application of new concepts. The opportunity to develop other important skills, such as leadership, teamwork and communication skills contribute to personal and social development. Fieldwork provides geographers with an opportunity to discover new ideas and information because they are in the **real environment** collecting data. It is also a valuable way of understanding geographical processes because the geographer is able to observe things first-hand, rather than just reading about them or watching a video.

- **Why do geographers use enquiry based questions and how are they developed?** All fieldwork begins with the geographer coming up with their enquiry question. An enquiry question is the question they are trying to answer during their fieldwork, so all their fieldwork needs to be based around answering that question. Geographers **COLLECT**, **RECORD** and **ANALYSE** data from the **real environment** in order to discover new ideas and information and be able to answer their enquiry question. Enquiry questions in geography can focus on either **human features**, such as towns and cities and how people use those towns and cities, or they can focus on **physical features**, such as rivers, lakes, beaches, coastlines.

Examples of Enquiry Questions: '**How has my town changed over the last three years?'** (This question focuses on a human feature of geography, which is towns and how that has changed over the time.)

'**How could my school become more environmentally friendly?'** (This question focuses on human and physical features because it's focusing a human feature, which is the school, but also the physical environment.)

'**What modes of transport do people in my community use?'** (This question focuses on human features of geography - people in a community. It is asking about how things are organised – how humans are organising our community.)

- **How and why do geographers create and use maps?** Maps are one of the most important fieldwork tools that a geographer has because they help geographers get a better overview of the environment that they are studying. Fieldwork is all about being in a real environment and maps can help you get a better overview of those areas. There are many different types of maps: **street maps** show you road names and the names of places and important locations (these are the main maps that we use in our day-to-day life, just to find our way around the communities that we live in, **topographic maps** (ordnance survey maps) show the height and the shape of the land, **political maps** (usually found in atlases) show us the boundaries between countries, **thematic maps** focus on a particular theme (for example, which sport is most popular in each country), **climactic maps** show us climate patterns in different parts of the world or within the same country.

- **How do geographers present their data and what do they do with it?**
- <u>Why is data presentation important?</u> Once data has been collected, you end up with lots of numbers or tally marks. The difficulty with this is that it's hard to see the 'story' of the data, so presenting the data in a way that everyone can see what the story of the data is, really helps. Presenting the data helps a geographer see what the patterns are. It also helps them to form conclusions.
- Our job as a geographer is to make the data, tell its story and make it easy to understand. You need to decide which is the best way to present your data. It could be in the form of a bar graph, line graph, pie chart or other form (see table).

- How do geographers use their data? Once geographers have collected and presented their data, they must analyse this data, so it can help them answer the enquiry question. Analysis is about looking at your data, and thinking about, "What does it tell you?" Once you have done this, you can then write a conclusion, and in your conclusion, you summarise your research, or you summarised what you have found from your analysis. Finally, geographers use this information to answer their enquiry question. Your sentence starter for your conclusion could be 'Overall, my data suggests that…' In your conclusion, you need to write down what your data showed. Once you have done that, you are going to need to answer your enquiry question. Your sentence starter for that could be, 'Therefore, the answer to my enquiry question is…'

As a summary: plan your fieldwork and develop an enquiry question, go out to complete the actual fieldwork, you have analysed your data, you have written a conclusion, and then you have answered your enquiry question.
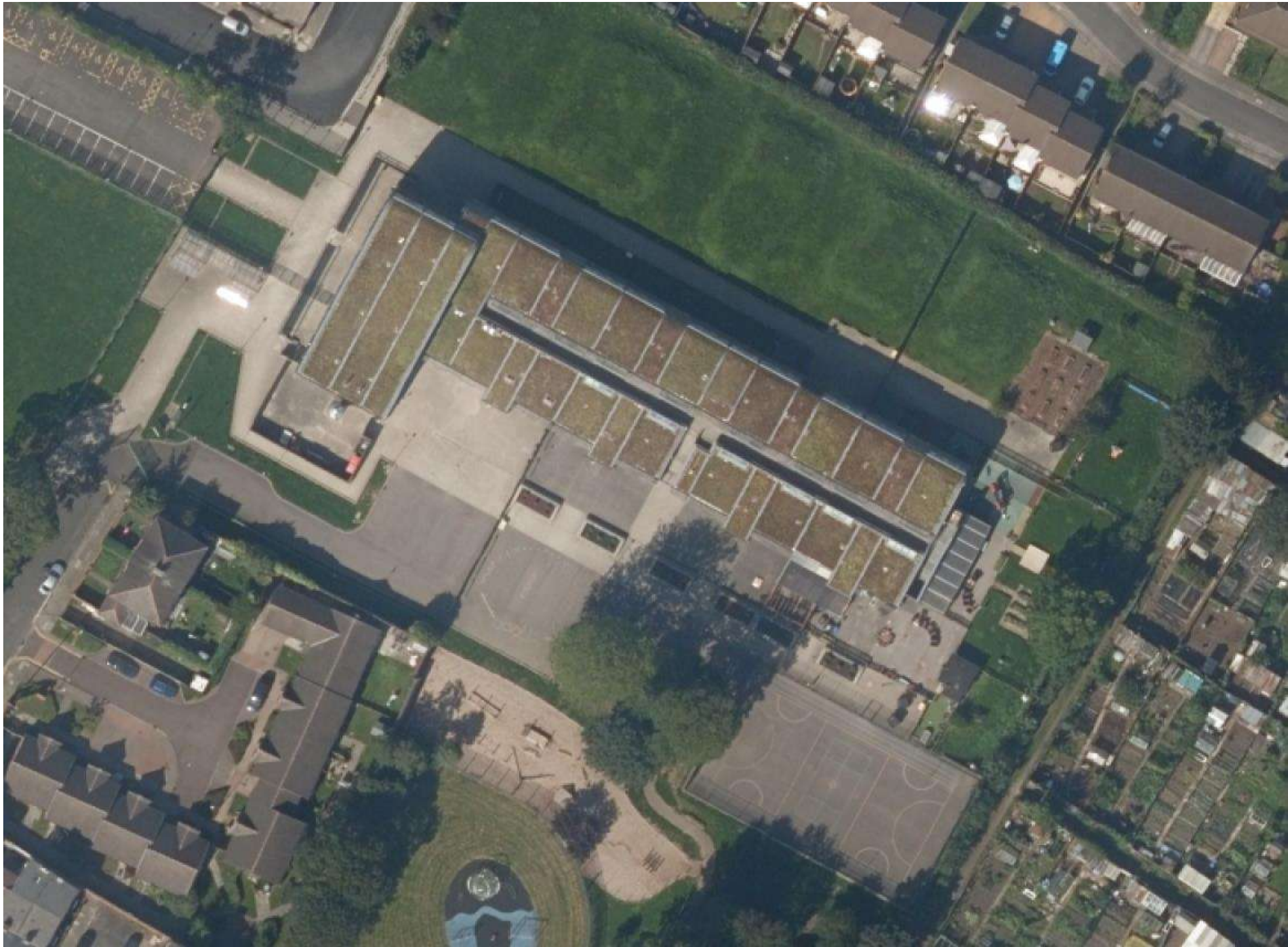
Fieldwork Rationale

Fieldwork is an essential element of geography because it provides pupils with an opportunity to develop and extend their geographical thinking in the 'real world'. They encounter geographical concepts and processes first-hand. Through observing, collecting data for themselves, analysing it and describing their fieldwork findings, pupils connect the learning they have done in the classroom with the complexity of the real world. Geography fieldwork also contributes to the teaching and of other key skills, including science and areas of maths such as number and statistics. The opportunity to develop other important skills, for instance, leadership, teamwork and communication skills, further contributes to pupils' personal and social development. By appealing to different learning styles, fieldwork can also enable pupils to become better all-round learners.

Through fieldwork, 'memorable moments' can be created for pupils in their geography education. Worthwhile fieldwork experiences must be carefully planned. If fieldwork is to provide valuable learning opportunities, it must be woven throughout the geography curriculum.

Northwood Primary School

Play Area

PENDLETON ROAD SOUTH

BOB HARRISON COURT

CLOSE STREET

HENRY STREET

PAUL'S TERRACE

PENDLETON

CLOSE

Sub Sta

Northwood Primary School

BOB HARRISON COURT

MIDDLETON ROAD SOUTH

CLOSE STREET

Play Area

27

49

E9

4

2

1

8

13

17

9

13

1

11

Grass	
Clump of grass	
Leaves	
Dandelion	
Clover	
Daisy	
Buttercup	
Moss	
Weeds	
Feathers	

Field Guide

Image	Notes
Twigs / Sticks	
Bark	
Woodlouse	
Beetle	
Millipede / Centipede	
Ant	
Wasp	
Bee	
Ladybird	
Other (Either write or draw and label anything else you observe.)	

What can we find in our school grounds?

NORTHWOOD
PRIMARY SCHOOL
...growing success
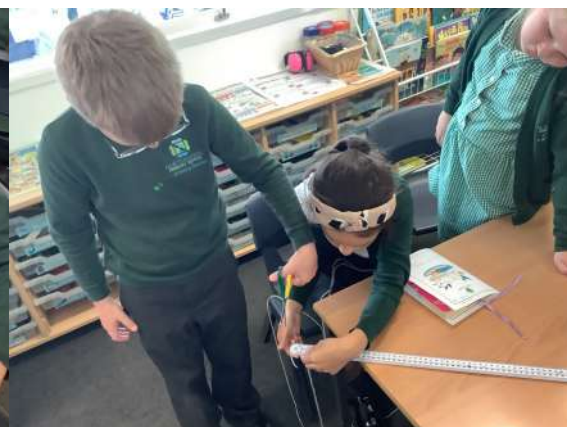
First of all we measured lengths of string. We needed to measure lengths of 1 metre to create our 1 metre square quadrants in the school grounds for our fieldwork.

N
x Year 3 classrooms
• Class 7 quadrants
▲ Class 8 quadrants
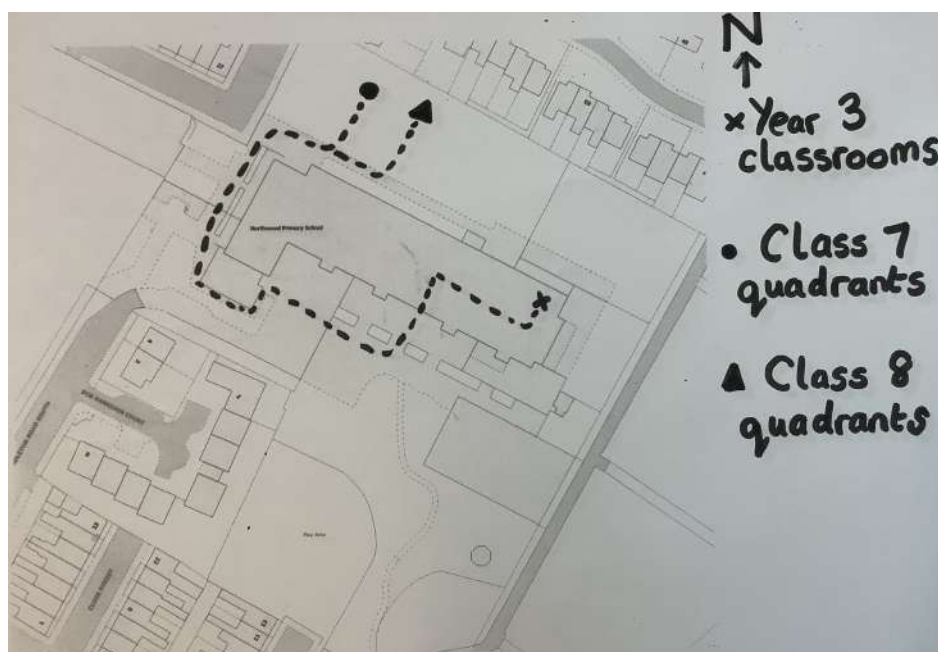
Next our teachers set up our quadrants and plotted the route we needed to follow to find them. We also discussed the points of a compass and plotted this on our map. We copied the route onto our own maps and then followed t to find them!
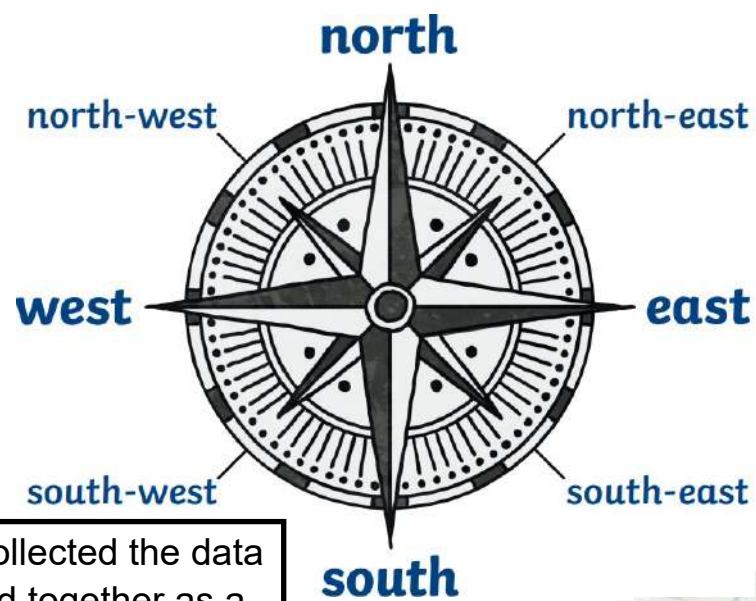
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north

north-west   north-east

west   east

south-west   south-east

south

Once we located our quadrants, we collected the data in the form of a tally chart. We worked together as a team to ensure that all of the data collected within the group was the same.

Back in the classroom, we used this collected data to represent what we found in our school grounds as bar chart.