# A fieldwork investigation of my local area's human and physical geography 

"I can think of few better ways to help young people become more knowledgeable, engaged with and perhaps respectful of their local environments and communities than to get them studying their local area from its historical geography to the current social, environmental and economic processes shaping the places they live in." Dr Rita Gardner, Former Director, Royal Geographical Society (with IBG)

## Learning Objectives

- To identify and describe the main human and physical features of your local area.
- To explore changes in the geography of your local area.


## National Curriculum for Geography

Geographical Aims: All pupils should understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.

## Key Stage 1

Place knowledge: Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country.

Human and physical geography: Identify seasonal and daily weather patterns in the United Kingdom. Use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather (and) key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.

Geographical skills and fieldwork: 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. Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.

## Key Stage 2

Place knowledge: Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.

Human and physical geography: Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle and human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork: Use maps, atlases, globes and digita//computer mapping to locate countries and describe features studied. Use the eight points of a compass, four and sixfigure 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.

## Activity overview

This unit of work will provide your pupils with:

- investigation in your local area focusing on its main human and physical geographical features and how they might be changing
- the use of a range of geographical skills including the use of maps, observation and field sketches
- fieldwork opportunities within your school's local area
- different ways of presenting information about your locality, which can be compared to the other localities studied at KS1 or KS2.


## Key vocabulary

The following geographical terms should be used and reinforced through this unit of work:

- Capital city: the primary city in a country which is usually a focus for a country's political, economic and cultural activities. The four capital cities of the constituent nations of the UK: Belfast (Northern Ireland), Cardiff (Wales), Edinburgh (Scotland) and London (England).
- Function: the main activities or purpose of a settlement. E.g. residential, industrial, commercial and recreational.
- Housing types: such as terraced, semi-detached, detached, flats or bungalows.
- Inner city. an area next to the city centre. Many inner-city areas are characterised by older and often terraced housing, although a number have been recently redeveloped with more modern buildings.
- Land use: the way in which land is used by people. Examples could include housing, industry or green spaces (such as parklands or farming).
- Market. the place where goods are sold.
- Rural: relating to the countryside.
- Service industry: work such as retail, administration, education, healthcare or tourism.
- Settlement pattern: the shape and spacing of settlements, settlements might be linear (such as following the path of a road or river), dispersed (such as a number of farms), or nucleated (such as a densely settled village or town).
- Settlement: a place where people live, which can be categorised into villages, towns and cities.
- Shopping centres: shopping areas that are characterised by being undercover and having ample parking.
- Site: the location of where a settlement first started.
- Situation: the location of a settlement in relation to the surrounding area.
- Suburb: the residential and commercial development at the edge of a city.
- Urban: relating to a town or city.
- Urbanisation: the increase in the percentage of people living in cities.


## Activity one: Key geographical questions and prior knowledge

Before you undertake your fieldwork it is valuable to ask your pupils to consider what geographical questions they could ask to find out about their local area. This will help them think like a geographer' when they undertake their fieldwork, and also provide a focus for their investigations.

## Key geographical questions

- What is the name of this place?
- Where is this place and which other places are near it?
- Is it a village, town, suburb or part of a city?
- What types of buildings can we find and what are they used for?
- What different types of land-use can we find?
- Are there any green spaces and what are they used for?
- Who lives here and what do they do?
- How do people use this landscape in different ways?
- Are there any local 'landmarks'?
- What types of transport links can we find?
- What evidence is there of connections to other places?
- What was this place like in the past?
- How and why is it changing?
- How is it similar or different to other localities that are being studied?

Your pupils will also have prior knowledge about the area they live in and it is useful to explore what key elements and features they already know about.

You may also wish to discuss what different sources of evidence and resources your pupils might use to answer these questions; which may include the use of direct observation, maps, photographs, asking people who live in the local area, digital resources and other materials.

Finally do encourage your pupils to think about both the human and the physical features in the local landscape. It is sometimes the case that physical geography is overlooked when pupils are studying a relatively 'built-up' area, with the presumption sometimes being that there isn't any physical geography in towns. However, most urban localities in the UK will have physical features underlying their human landscape, be it local streams, rivers or lakes, hills or valleys or areas of woodland and forest. See below for an example of a way of assessing prior human and physical geography knowledge.


## Activity two: Mapping your local area and planning your investigation

In order to plan your fieldwork you will need maps of your local area, which can be sourced from the Ordnance Survey, Esri UK or Google Earth.

The Society recommends that schools become subscribers to the Ordnance Survey's Digi Map for school service (http://digimapforschools.edina.ac.uk/cosmo/home) which provides access to OS mapping for the your local area and the rest of the UK. In addition, free online maps of your local area can be accessed through an online ArcGIS online account (http://www.esriuk.com/products/arcgis-schools/try-now). These maps can be used on an interactive whiteboard, on tablets and other mobile devices and also printed out for your class to use.

Google Earth also provides visualisation of your local (and other) areas and its street view application will take you right down to street level within a locality.

Planning your route, key issues:

- Ask your pupils to use geographical terminology when they are describing directions, e.g. north, south, east and west; use the scale (or ruler bar on Google Earth) to measure the length of their route; and use four and six figure coordinates to identify the location of features.
- What information can you find from the key e.g. are there green spaces already marked on a map? From the map symbols, can you see whether the housing is terraced, detached or semi-detached?
- Can your pupils identify places on your local map that your pupils already know about, such as their homes or places of local interest?
- What physical features can you identify from the map e.g. streams and rivers, hills and valleys, woodland or fields?
- Can you identify areas where pupils should be particularly aware of issues to do with safety e.g. crossing a road, near the edge of a water course or railway?

Note: you may also wish to draw on the ideas and activities outlined in the Society's accompanying fieldwork units on weather, rivers and woodlands which may have relevance to your local area.

## Activity three: Recording data in the field

Your pupils can record their data from their fieldwork in many different ways including:

- Annotating a base map with information
- Field sketches of different scenes, street-scapes or views that they see
- Taking photographs and recording the location and information they are collecting. The following table could be adapted for this.

| Can we find the following in <br> our local area? | Evidence | Location |
| :--- | :--- | :--- |
| Terrace housing | Field sketch or photograph | Street name and grid reference |
| Semi-detached housing | Field sketch or photograph | Street name and grid reference |
| A river | Field sketch or photograph | Grid reference |
| A park | Field sketch or photograph | Grid reference |
| etc |  |  |

- Collecting the views of people they might meet on their fieldwork such as local shop keepers or office workers (it can be useful to 'prime' a couple of friendly local contacts before visiting them) or people who might be in the local area.
- Completing tally charts to record the number of certain types of features e.g. different types of housing, land-use or shops. For example see the tally chart below which could be used to see how buildings on either side of your local high street are used.

| Type of use |  | Type of use |
| :---: | :---: | :---: |
| Building no 1 |  | Building no 2 |
| Building no 3 |  | Building no 4 |
| Building no 5 |  | Building no 6 |
| etc |  | etc |

Adapt the following key to design appropriate symbols to identify the different types of shops and other uses found on your high street.

| Building use | Key |
| :--- | :--- |
| Restaurant or café | Symbol |
| Bank or post office | Symbol |
| Office or estate agent |  |
| Chemist or dentist |  |
| Clothes or shoe shop |  |
| Supermarket |  |
| Gym, sports centre or swimming pool |  |
| Hair-dressers, nail bar or beauty salon |  |
| Place of worship |  |
| Other use |  |

- You might also ask your pupils to work in groups so that they collect different types of information about their local area. For example one group might focus on shopping, another on housing, a third on local people and a forth on green-spaces. They could then combine their results together as a class.
- You could focus on how the local environment is maintained or improved by looking at how well people look after their local area.
- Annotating a copy of a historic photograph of the local area to identify what changes have taken place.

Example of follow up class work: pie charts


Key How attractive do you think Engiald tear

- Totally Unattractive $5 \%$
- Unattractive in places $21 \%$

Attractive 51\%

- Very Attractive 23\%


Example of follow up classwork:



## Activity four: Presenting your results

There are many different and creative ways for your pupils to share the information they collected through their fieldwork. However, whichever approaches you take do ensure your pupils' are addressing the key geographical questions that they wanted to answer through their fieldwork. In addition, their classwork should also focus on the human and physical geography of their local areas (not the fact that they might have had a 'nice picnic' in the park), and reinforce both the appropriate geographical vocabulary and also the skills they develop through map work and in the field itself. In addition, you may wish to draw on other sources of information about your local area to develop your pupils work and a wider range of additional material - from local census date, flood risk or pollution levels - are available from the organisations listed in the 'links section' below.

They might share their work through the following:

- Creating a land-use map of their local area with a key and symbols and annotated sketches or photos (including aerial photographs) to record the information from their field notes.
- Build a model of their high-street or other local place using their information to identify key buildings and their uses.
- Then and now maps, identifying key aspects of change in your local area drawing on historic resources and the current circumstances.
- Write a tourist guide (and do include a map!) to advertise your local area to other people.
- Route planning locally. Ask your pupils to write routes (using correct geographical terms for direction and using coordinates etc.) for a different range of routes e.g. the journey to school, visiting family and friends, a place of worship or to attend a club or sporting activity.
- Plan and publish a geographical walk as a guide to your local area. This should be based on your local map and include key points of local interest and land-marks as well as information which would allow others to better understand your local area's geography.
- The Society's Discovering Britain project (which has published 130 local geographical walks across the UK) provides a model for this approach. Once your pupils have written their walk maybe share it with your local newspaper and see if they will publish it as a guide to your local area.

Note: your local study will also provide invaluable information as the basis of a comparison with other localities you might study within KS1 or KS2 to help identify similarities and differences in the human and physical geography between them.

## Useful Links:

- Royal Geographical Society (with IBG)
- Fieldwork units on weather, rivers and woods: www.rgs.org/rlg
- KS2 units on studying the UK, mapping, weather and climate, rivers and water, settlement and land use, Mountains, Volcanoes and Earthquakes, and The Mediterranean can be found on: www.rgs.org/resources (available from late 2014/ early 2015)
- A photographic overview of Britain's natural, built and managed environments is provided by the Society's Britain from the Air online exhibition, which has accompanying educational activities. Please see www.rgs.org/bfta
- The Society's Discovering Britain has published over 130 short geographical walks spanning Birmingham's industrial heritage to Bodmin's wild landscape to the natural environments on the edge of Heathrow airport to the former pit village of Grimethorpe. www.discoveringbritain.org/
- Ordnance Survey. You can view a map of your local area through the Ordnance Survey's Open Data mapping view http://www.ordnancesurvey.co.uk/oswebsite/opendata/viewer/.

Schools can access much more extensive OS data through Digi Maps for Schools http://digimapforschools.edina.ac.uk/cosmo/home.

- Esri produce lessons around GIS which can be found on: http://www.esriuk.com/products/arcgis-schools. (Also see: http://www.arcgis.com/home/webmap/viewer.html)
- Google Earth can be used to help explain spatiality and locality:
http://www.google.co.uk/int//en uk/earth/
You can also choose to show additional information by selecting from the Layers section to highlight for example, roads, parks and other recreation facilities, the outline of bodies of water, transportation links or key buildings in 3D
See:
http://www.rgs.org/OurWork/Schools/Fieldwork+and+local+learning/Fieldwork+techniques/ Fieldwork+technology/Google+Earth+as+a+fieldwork+tool.htm
- Information about the underlying geology of your local area (and for the UK) can be found at http://mapapps.bgs.ac.uk/geologyofbritain/home.html
- Local census data providing information about population, housing, ethnic and religious diversity or employment types is available from Neighbourhood Statistics (http://www.neighbourhood.statistics.gov.uk/dissemination/). You can search by place name, post code and also local authority and view different levels of data.
- Information about climate data (and your local weather forecast!) is provided by the Meteorological Office. UK climate averages for the period 1981-2012 covering temperature, rainfall and sunshine are available from: http://www.metoffice.gov.uk/climate/uk/averages/key-features-1981-2010.html
- The Field Studies Council provides informative and educational opportunities for people of all ages to better understand the environment: http://www.field-studies-council.org/

There are also a wide range of other national data sets available, which can also be searched by your local area including:

- Flood risk maps http://maps.environment-
agency.gov.uk/wiyby/wiybyController?value=N21+1AL\&lang= e\&ep=map\&topic=floodmap \&layerGroups=default\&scale=11\&textonly=off\&submit. $x=11 \&$ submit. $\mathrm{y}=10 \# \mathrm{x}=531311 \& \mathrm{y}=19$ $5850 \& \mathrm{lg}=1, \&$ scale $=11$
- Air quality and pollution http://uk-air.defra.gov.uk/interactive-map
- Crime http://www.police.uk/

