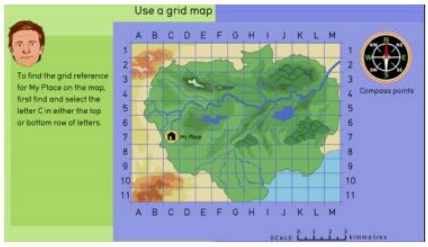
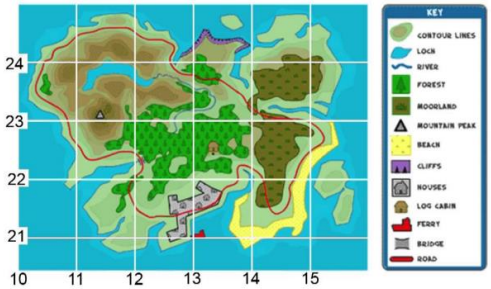
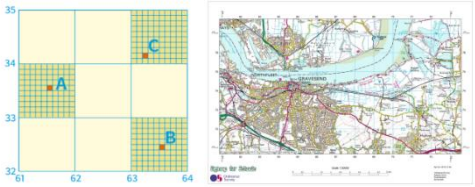
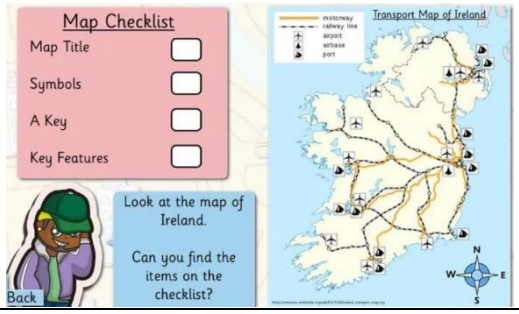
Geography: Mapwork, Fieldwork, Enquiries

MAPWORK - Using Maps to Describe Landscape		
	KNOWLEDGE	**SKILLS**
EYFS	• Know that we can describe something by comparing it to something else	• Use relative vocabulary such as bigger, smaller, like, dislike
Year 1	• Know that we can describe the place of something. This is called its location.	• Use directional language such as near and far, up and down, left and right, forwards and backwards • Begin to use simple compass directions (North, South, East, West)
Year 2	• Know that a compass can describe the location of something relative to the centre point • Know the names of key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop • Know the names of key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather	• Use simple compass directions (North, South, East, West) • Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features 
Year 3	• Know that the boundary of a country can be marked by a physical feature such as a mountain range • Know that the boundary of a country can be invisible but marked by a line on a map • Know that a map can show a small area of land or a large area of land • Know that when reading coordinates, you read across the x-axis and up/down the y-axis • Know that when reading coordinates the point at which the lines or row/columns intersect is the location of the place/feature	• Identify features using 4 figure compasses (NSEW). E.g. The Nile runs from south to north in Egypt. • Identify features using letter/number co-ordinates • Use 4- figure coordinates to locate features.  • Match boundaries (e.g. find same boundary of a country on different scale maps)  
Year 4	• Know that a large scale map is one that shows lots of detail, normally over a smaller area • Know that a small scale map is one that shows less detail, normally over a larger area • Know that an aerial photograph is a photograph taken from above • Know that when reading four-figure grid references the first two numbers represent the x-axis and the second two numbers represent the y-axis • Know that four-figure grid references take you to a box within the grid, not just a specific point like a co-ordinate • Know that latitude and longitude are a system of lines used to describe the location of any place on Earth.	• Use four figure grid references to identify features on a map, including the use of a key • know that 6 figure Grid References can help you find a place more accurately than 4- figure coordinates  • Locate places and features on a range of maps (variety of scales)

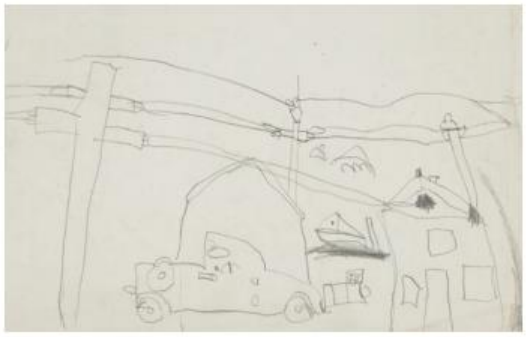
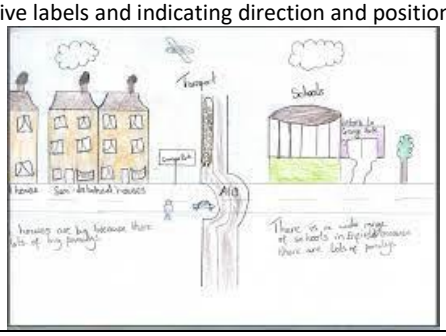
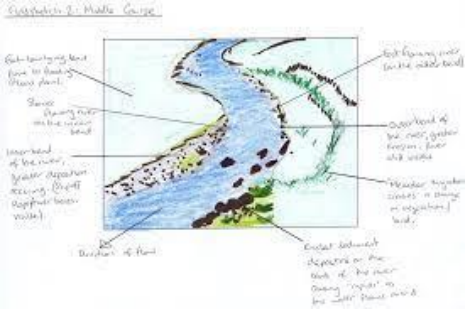
	• Know that lines of latitude run in an east-west direction across Earth. • Know that lines of longitude run in a north-south direction. Although these are only imaginary lines, • they appear on maps and globes as if they actually existed.	• Identify features on an aerial photograph, digital or computer map • Begin to use 8 figure compass directions when describing landscapes. E.g. Mount Vesuvius is located north-west of Pompeii • Use lines of longitude and latitude on a map to locate a feature
Year 5	• Know that an aerial photograph is a photograph taken from above • Know that when giving an 8 figure compass direction, north or south come first, then east or west. E.g. NE, NW, SE, SW • Know that six-figure grid references are split into two groups of three digits • Know that the first two digits of the first group represent the numbers on the x-axis • Know that the first two digits of the second group represent the numbers on the y-axis • Know that the last digit of each group of three represents going across/up the box as if it were split equally into ten columns and rows • Know that an Ordnance Survey map is a detailed map produced by the British government map-making organisation • Know that a symbol represents a real life human or physical feature	• Compare two landscapes using maps and aerial photographs  • Find and recognise places on maps of different scales • Use 8 figure compasses directions when describing and comparing places and landscapes. E.g. the Isle of Dogs is north-west of Greenwich park • Describe the features shown on an OS map by using the key and symbols • Begin to use 6 figure grid references by finding the location of a place or feature 
Year 6	• Know that geographical artefacts such as maps and aerial photographs can tell us about human behaviour, such as settlement choices • Know that when giving an 8 figure compass direction, north or south come first, then east or west. E.g. NE, NW, SE, SW • Know that six-figure grid references are split into two groups of three digits • Know that the first two digits of the first group represent the numbers on the x-axis • Know that the first two digits of the second group represent the numbers on the y-axis • Know that the last digit of each group of three represents going across/up the box as if it were split equally into ten columns and rows	• Make geographical conclusions based on analysis of a landscape using maps and aerial photographs. E.g. Many mines can be found in the north-east of South Africa which shows that this region is richer in resource. This land could be under conflict if many people want the resource • Use 8 figure compass directions when describing and comparing places and landscapes on a variety of scales • Use 6 figure grid references accurately by giving and finding the location of a place or feature
Year 7	• Know that physical and natural features are displayed on OS maps • Know the process to distinguish between different Geographical features on OS maps (e.g. Upper course of river compared to Lower course) • Know that OS maps can be used to gather information to describe a landscape/land use of an area.	• Describe the landscape of an area by interpreting OS maps and aerial maps referring to relief, physical and human features. • Applying/recognising Geographical features studied in the Y7 Unit of work on maps (e.g. different courses of a river, tributaries, points of confluence) • Identifying areas at risk on maps • Make predictions of how the land may change in the future (e.g. as a result of river flooding causing levees etc.)

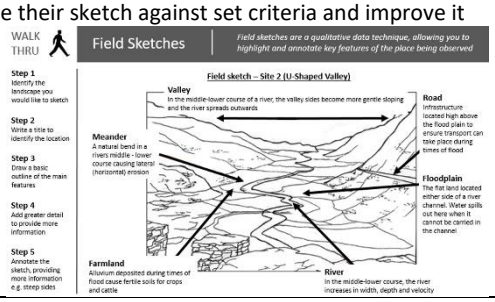
MAPWORK – Making Maps		
	KNOWLEDGE	**SKILLS**
EYFS	• Know that a drawing can represent something real • Look at signs and symbols on different types of maps for example in school, and the local community	• Draw 2D representations of familiar objects • Draw and create their own maps using real objects, and/or pictures and symbols 
Year 1	• Know that we can copy pictures from photographs and maps to create our own map • With support, use symbols on maps (own and class agreed symbols) • Know that symbols mean something on maps • Find a given Ordnance Survey symbol on a map with support • Beginning to realise why maps need a key	• Draw basic maps, including appropriate pictures to represent places or features • Use photographs and maps to identify features 
Year 2	• Know that a symbol is a pictorial representation of a real-world object • Know that a key provides the names of a symbol to avoid having to label each symbol on a map	• Draw or make a map of real or imaginary places • Use and construct basic symbols in a key • Find a given Ordnance Survey symbol on a map with support • Understand why maps need a key 
Year 3	• Know that a symbol is a simpler version of a pictorial representation of a real-world object • Know that standard symbols are used across lots of different maps to make them easier for people to understand and become familiar with • Know that a key provides the names of a symbol to avoid having to label each symbol on a map	• Draw or make a map of a real location that includes human and physical features • Start to use standard symbols; use some Ordnance Survey style symbols 
Year 4	• Know that a sketch is a drawing of an area from a given viewpoint • Understand that a map is an aerial perspective of an area with 2D symbols representing the world • Know that the positioning of symbols on a map is important and must be accurate in relation to one another as maps are used for navigating	• Draw a map based on a fieldwork sketch with positioning of key features located accurately in relation to one another • Use plan views regularly • Give maps a key with standard symbols • Use some Ordnance Survey style symbols

Year 5	• Know that an Ordnance Survey map is a detailed map produced by the British government map-making organisation	• Draw a map with positioning of key features located accurately in relation to one another and use OS symbols • Appreciate maps cannot show everything. • Use standard symbols • Know 1:50.000 symbols and atlas symbols
Year 6	• Know that map scale is the relationship between distance on the map and distance in real life	• Draw a map that shows appropriate distance between places or features based on a given scale  **A SKETCH OF A VILLAGE (not drawn to scale)**  A PLAN OF A VILLAGE(drawn to a scale)
Year 7	• Know that well drawn/annotated diagrams can support explanations • Know that maps can change over time, due to physical and human processes/activities	• Draw and accurately annotate landscaped map of a key geographical area to support learning of key features within a Y7 unit (e.g. Rivers - upper course of a river vs lower course) • Use drawings and maps in a sequential way to describe a process (E.g. formation of oxbow lake)

FIELDWORK – Sketching

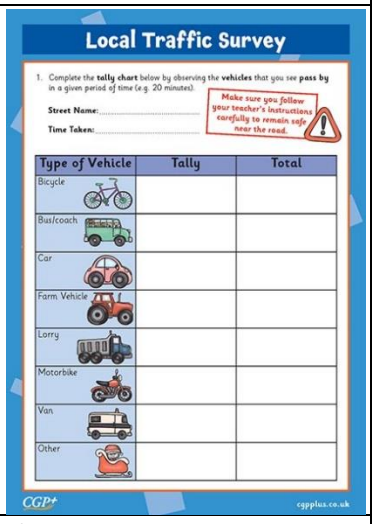
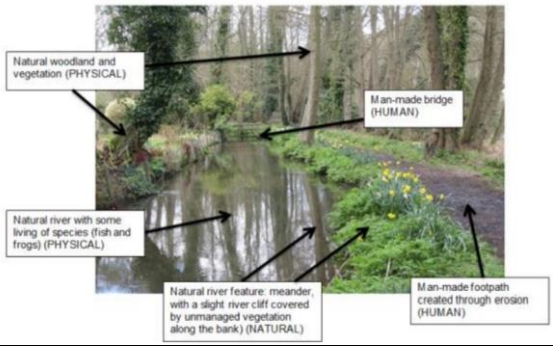
In order for children to understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time, they need to engage in fieldwork activities and capture their surroundings through sketching. As children progress through their time at Egerton Primary School, they become more proficient sketchers and are able to communicate their findings in an informative way.

	KNOWLEDGE	SKILLS
EYFS	• Know that a drawing can represent something real • Know that objects can be described based on their size and colour	• Draw their familiar environment, accurate with colour and key features
Year 1	• Know that we can capture what we see by drawing • Know that words can be used to label drawings, maps and photographs so they are clearer	• Create plans and draw simple features in their familiar environment, mainly made up of outlines of features  • Add labels onto a sketch map, map or photograph of features
Year 2	• Know that we can capture what we see by drawing and the more detail we add, the more accurate they will be • Know that words and phrases can be used to label drawings, maps and photographs so they are clearer and describe the features • Know that adjectives describe objects and places	• Create plans and draw simple features in their familiar environment • Add labels onto a sketch map, map or photograph of features 
Year 3	• Know that sentences can be used to label drawings, maps and photographs so they are clearer and describe the features • Know that adjectives describe objects and places • Know the four points of a compass (NSEW) as well as positional language such as above, below, beneath, next to, between, opposite	• Draw an annotated sketch from an observation including descriptive labels and indicating direction and position 
Year 4	• Know that sentences can be used to label drawings, maps and photographs so they are clearer and describe the features • Know that adjectives describe objects and places • Know that causal conjunctions are used to start an explanation, such as because, since, so, as • Know the four points of a compass (NSEW) as well as positional language such as above, below, beneath, next to, between, opposite • Know that 6 figure Grid References can help you find a place more accurately than 4- figure coordinates	• Draw an annotated sketch from observation including descriptive and explanatory labels and indicating direction and position 

Year 5	• Understand that a geographical investigation is where you use inquiry skills such as sketching to generate and answer questions about an area • Understand that a geographical process is a sequence of actions that shape or change our environment • Understand that a geographical pattern is similarities in observations that can be used to describe an environment	• Use sketches as evidence in an investigation • Annotate sketches to describe and explain geographical processes and patterns
Year 6	• Understand that a geographical investigation is where you use inquiry skills such as sketching to generate and answer questions about an area • Know that there are limitations of fieldwork sketches, such as accuracy because they are drawn by humans • Know that photographs are accurate snapshots of an area but go out of date • Know that capturing movement is not possible in a sketch or photograph, so video can be used or data collection which can be presented in a graph over time	• Use sketches as evidence in an investigation • Select field sketching from a variety of techniques • Annotate sketches to describe and explain geographical processes and patterns • Evaluate their sketch against set criteria and improve it 
Year 7	• Know that a fieldwork is a data collection and presentation technique • Know the advantages and disadvantages of using field sketches	• Use fieldwork opportunities to practice annotated and details field sketches specifying between physical and human features • Evaluate the effectiveness of field sketches

FIELDWORK – Gathering Information

In order for children to 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, they need to engage in fieldwork activities and capture their surroundings through gathering information. As children progress through their time at Egerton Primary School, they become more proficient data gatherers and are able to communicate their findings in an informative way.

	KNOWLEDGE	SKILLS
EYFS	• We learn about our world through our senses • Our senses are: see, hear, smell, touch and taste	• Describe their local environment using their senses
Year 1	• Know that we can comment on the size, shape, colour, location of something	• Orally comment on observations about what they see and draw simple features (e.g. buildings, roads, trees) • Ask geographical questions e.g. What is it like to live in this place?
Year 2	• Know that we can comment on the size, shape, colour, location of something • Know that when carrying out a tally survey, a tally mark is recorded every time a given criterion is seen • Know that one line represents one of the given criterion and tally marks are grouped in fives but drawing a diagonal line across four vertical lines	• Comment on observations about what they see and draw simple features (e.g. buildings, roads, trees) and label these diagrams • Carry out a small survey of the local area/school. Use a pro-forma to collect data e.g. tally survey • Ask geographical questions. E.g. Where is this place? What is it like to live here? How has it changed? 
Year 3	• Know that in an area, some things are there naturally whereas some things have been put there by humans	• Record findings from fieldwork • Collect data using a tally survey • Use geographically numerical descriptive language • Ask geographical questions. E.g. Where is this location? What is it like to live in this location? What natural and manmade features are in this location? 
Year 4	• Understand that land use can be classified, such as city, residential, suburban, farmland • Understand that environments change over time due to natural and human processes	• Collect data using a range of data collection techniques, e.g. land use, environmental quality • Ask geographical questions. E.g. What is this landscape like? What natural and man-made features are in this location? What will it be like in the future?
Year 5	• Know that gathering information can happen through observations (seeing and making judgements) and speaking to people (ask people questions about how they interact with the area)	• Select appropriate methods for data collection such as interviews, questionnaires, observations • Evaluate the quality of evidence collected and suggest improvements • Ask geographical questions. E.g. What is this landscape like? How has it changed over time? What made it change? How is it currently changing? What could make the evidence we have collected unreliable?
Year 6	• Understand that field work carried out by humans gives a snapshot of one moment in time, however, digital	• Use digital technology to gather information over time

	equipment can be used to gather data over time for a more accurate assessment (e.g. an electronic weather vane)	• Ask geographical questions. E.g. What is this landscape like? How is it changing? What patterns can be seen/how has the pattern changed?
Year 7	• Know that Geography aims to explore enquiry questions • Know the difference between primary and secondary data sources (collected by oneself or somebody else)	• Show an awareness of geographical enquiry questions • Differentiate a range of primary and secondary data collection techniques • Assess the reliability of the data gathered from the source (primary or secondary)

ENQUIRY – Analysing, Interpreting and Presenting Information		
In order to foster competent geographers who collect, analyse and communicate with a range of data gathered through experiences of fieldwork, students deepen their understanding of geographical processes as well as their ability to present such information.		
	KNOWLEDGE	**SKILLS**
EYFS	• Know language used for describing objects: • Size: big, small • Weight: light, heavy • Position: near, far • Time: quick, slow	<u>Analysing and interpreting information</u> • Use everyday language to talk about size, weight, capacity, position, distance and time to compare quantities and objects and to solve problems. <u>Presenting information</u> • Create and describe patterns
Year 1	• Know that one mark in a tally chart is used for one object/person obtained/observed • Know that tallies can be grouped in fives to make them easier to count	<u>Analysing and interpreting information</u> • Answer simple questions by counting the number of objects in each category • Answer questions making direct comparisons between two observations • E.g. When comparing the UK and Kenya on a map, pupils can state that the UK has a cooler climate than Kenya [analysing] because it is further away from the equator [interpreting]. <u>Presenting Information</u> • Present geographical data as a tally chart • E.g. during fieldwork, pupils count objects and mark using a tally
Year 2	• Know that a picture in a pictogram can represent one or more of an object • Know that the key in a pictogram tells you how much each picture is worth • Know that the scale on the y axis of a block diagram tells you how much of something you have • Know that a row in a table displays data horizontally/across • Know that the column in a table displays data vertically/up/down	<u>Analysing and interpreting information</u> • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • Ask and answer questions about totalling and comparing categorical data • Ask and answer questions that make observations on multiple criteria • E.g. when comparing the world's oceans, pupils are able to use a map to identify where the oceans are located, or read a table to establish the average temperatures [analysing] and then make comparative statements such as "the Arctic ocean is the coldest because it is furthest north." [interpreting] <u>Presenting Information</u> • Construct simple pictograms, tally charts, block diagrams and simple tables • E.g. after an observation of the local area where pupils have collated data in a tally chart, pupils can present this as a pictogram.
Year 3	• Know that a picture in a pictogram can represent one or more of an object • Know that the key in a pictogram tells you how much each picture is worth • Know that the scale on the y axis of a block diagram tells you how much of something you have • Know that the scale on a bar chart can go up in ones, but also increments of other numbers • Know that a marked scale is where numbers are marked on the x/y axis at each interval • Know that a row in a table displays data horizontally/across • Know that the column in a table displays data vertically/up/down	<u>Analysing and interpreting information</u> • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables • E.g. when comparing the scale of different earthquakes, pupils are able to read the magnitude/number of casualties/people displaced and make direct comparisons [analysing]. <u>Presenting information</u> • Present data using bar charts, pictograms and tables • E.g. When looking at population in different areas, pupils can show the population levels and state which area is most/least populous as well as comment by how much.
Year 4	• Know that the scale on the y axis of a block diagram tells you how much of something you have • Know that the scale on a bar chart can go up in ones, but also increments of other numbers • Know that a marked scale is where numbers are marked on the x/y axis at each interval • Know that an unmarked scale is where numbers are not marked on the x/y axis at each interval	<u>Analysing and interpreting information</u> • Begin to relate the graphical representation of data to recording change over time. • E.g. when using a graph that shows how much of a good has been imported into a country over time, pupils can state which year was the highest/lowest import and the difference between the two [analysing] and interpret how demand over time has affected this and give reasons why [interpreting].

	• Know that as you move from left to right on a time graph, this shows the passing of time	• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs <u>Presenting information</u> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs • E.g. construct a graph that shows the type of goods that are exported by the UK
Year 5	• Know that the appropriateness of how we present data is determined by how much data we have, what sort of enquiry (e.g. quantity of something, passing of time) and how clear our findings are	<u>Analysing and interpreting information</u> • complete, read and interpret information in tables • solve comparison, sum and difference problems using information presented in a line graph • E.g. when investigating rainfall linked to flooding, pupils are able to make comparisons between actual rainfall, the normal average rainfall and increases/decreases in each, as well as comment on percentage increases and decreases where appropriate <u>Presenting information</u> • begin to decide which representations of data are most appropriate and why
Year 6	• Know that a variable is something that changes • Know that the mean is the average of a set of data	<u>Analyse information</u> • calculate and interpret the mean as an average, knowing when it is appropriate to calculate a mean of a data set <u>Presenting information</u> • encounter and draw graphs relating two variables, arising from their own enquiry • construct pie charts and line graphs
Year 7	• Know that conclusion can be drawn from a data set • Know a range of techniques to analyse findings (mean, mode, median) • Know what anomalies are and how to spot them • Know a range of data presentation techniques • Know a range of interpretation skills for a variety of data presentation methods	• Analyse findings of Geographical investigations • Interpret a range of Geographical data presentation techniques (bar chart, scatter graphs, choropleth maps, pie charts, pictograms etc) • Differentiate a range of primary and secondary data presentation techniques • Differentiate any anomalies within a data set • Accurately draw and present data in a range of techniques (bar graphs, scatter diagrams etc.)

ENQUIRY – Conclusion and Results		
	KNOWLEDGE	**SKILLS**
EYFS	• Understand that everyone has different ideas that we may or may not agree with	• Agree or disagree with someone or a point being made
Year 1	• Know that a data tells us about people/places being studied	• Consider why the data exists: What was the purpose of the data collection?
Year 2	• Know that data can be something that people used in the past	• Consider how the data was collected • Who collected the data? When was it collected?
Year 3	• Understand that geographers use evidence to understand the past • Understand that evidence based on more than one source makes it more reliable	• Link data to conclusions
Year 4	• Understand that evidence based on more than one source makes it more reliable	• Consider if there is more than data set that leads to the same conclusion • Identify data that do not support an enquiry.
Year 5	• Understand that conclusions made from data from different sources/investigations can help geographers when making interpretations for their own geographical enquiry	• Consider the significance of data • Are there any similar trends from other sources or investigations we've studied
Year 6	• Understand that summative data adds different degrees of value to a geographical enquiry depending on what is being investigated • Understand that more than one interpretation with the same conclusion likely means it is a more reliable viewpoint	• Select evidence from a range that is the most reliable, considering validity and bias
Year 7	• Know that conclusions need to be evidence based • Know that accuracy and reliability are essential • Know strategies to increase the accuracy and reliability of investigations • Know a range of strategies to improve the Geographical investigation	• Draw evidenced-based conclusions from a Geographical investigation • Articulate the strengths and weaknesses of a geographical investigation • Suggest improvements of geographical investigation for the future • Draw conclusions from results