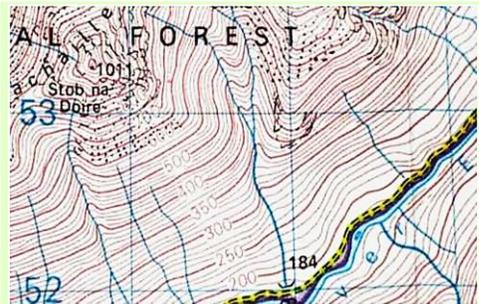
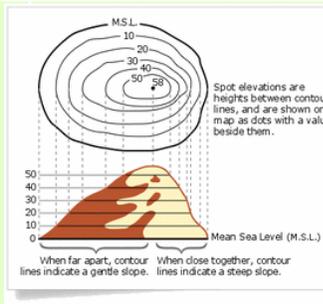


## Contour Lines and Triangulation Points (Trig points)



- Contour lines joint points of **equal height**.
- The **closer** the lines are, the **steeper** the land, the further apart they are, the more **gentle** the slope.
- Contour lines are always **brown** on a map.
- If there are lots of contour lines and the numbers go up in one direction then you are looking at a hill on the map, however if you can see very **few contour lines** then the land is **flat** or **gently sloping**.
- Trig points** are shown as a **black dot** on a map and they show the height of a specific place.



## OS Map

OS = Ordnance Survey



# GEOGRAPHY MAP SKILLS

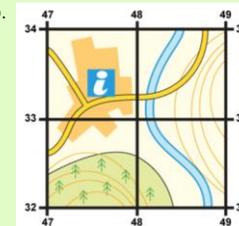


## Four and Six Figure Grid References

**Four Figure** grid references allow you to locate a particular area on a map.

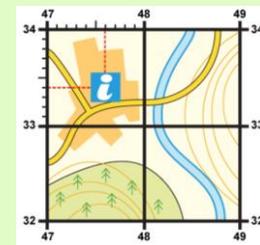
You always read the grid reference from the bottom left hand corner. The golden rule for reading grid references is always go along the X axis (the bottom) first and record those numbers first, then go up the side and record those numbers second.

**'Along the corridor & up the stairs'**.



**Six Figure** grid references allow you to locate a particular location on a map.

- To work out a 6 figure grid reference first, find the four-figure grid reference but leave a space after the first two digits.
  - Estimate or measure how many tenths across the grid square your symbol lies. Write this number after the first two digits.
  - Next, estimate how many tenths up the grid square your symbol lies. Write this number after the last two digits.
- You now have a six figure grid reference.



## The 8 and 16 Point Compass Rose

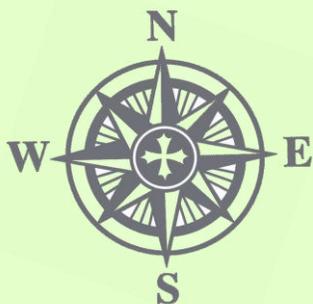
A good way of remembering the compass directions is

- Never - North**
- Eat - East**
- Shredded - South**
- Wheat - West**

When describing locations from a map you should use compass directions in order to improve your accuracy.

Remember that if the location you are describing is between north and west then the compass direction is north west **NOT** west north.

You should use compass directions when describing features in relation to each other.



## Geography

**Human Geography** – how human activity affects or is influenced by the earth's surface.



**Physical Geography** - the study of processes and patterns in the natural environment



**Environmental Geography** - the physical environment and its effect on humans.



## Common Map Symbols

ROADS AND PATHS	Not necessarily rights of way
Service area	Elevated
M1	Motorway (dual carriageway)
Unfenced	Motorway under construction
A 470	Primary Route
A 483	Dual carriageway
	Main road
	Primary Route / Main road under construction
	Secondary road
B 4618	Narrow road with passing places
A 855	Road generally more than 4m wide
	Road generally less than 4m wide
	Path / Other road, drive or track
	Gradient: 20% (1 in 5) and steeper, 14% (1 in 7) to 20% (1 in 5)
	Gates / Road Tunnel
Ferry P	Ferry (passenger) / Ferry (vehicle)

## TOURIST INFORMATION



Camp site

Caravan site

Garden

Golf course or links

Information centre, all year / seasonal

Nature reserve

Parking, Park and ride, all year / seasonal

Picnic site

Selected places of tourist interest

Telephone, public / motoring organisation

Viewpoint

Visitor centre

Walks / Trails

Youth hostel

## BOUNDARIES

- National
- District
- County, Unitary Authority, Metropolitan District or London Borough
- National Park

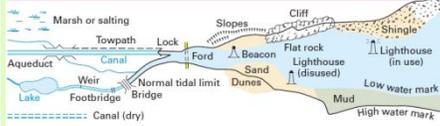
## ANTIQUITIES

- Site of monument
- Stone monument
- Battlefield (with date)
- Visible earthwork
- VILLA Roman
- Castle Non-Roman

## ABBREVIATIONS

- |               |                                        |
|---------------|----------------------------------------|
| CG Coastguard | P Post office                          |
| CH Clubhouse  | PC Public convenience (in rural areas) |
| MP Milepost   | PH Public house                        |
| MS Milestone  | TH Town Hall, Guildhall or equivalent  |

## WATER FEATURES



## RAILWAYS

- |                                                     |                                    |
|-----------------------------------------------------|------------------------------------|
| Track multiple or single                            | Bridges / Footbridge               |
| Track under construction                            | Level crossing                     |
| Siding                                              | Viaduct                            |
| Tunnel                                              | Station, (a) principal             |
| Light rapid transit system, narrow gauge or tramway | Light rapid transit system station |

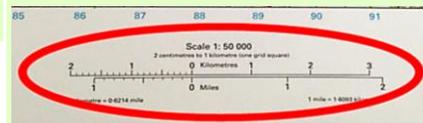
LAND FEATURES	
Electricity transmission line (symbols shown at standard spacing)	Outcrop / embankment
Pipe line (arrow indicates direction of flow)	Quarry
Buildings	Spill heap, refuse tip or dump
Public building (selected)	Coniferous wood
Bus or coach station	Non-coniferous wood
Place of worship (with tower, with spire, minaret or dome without such additions)	Mixed wood
Chimney or tower	Orchard / Park or ornamental ground
Glass structure	Forestry Commission access land
Helipoint	National Trust-leased open
Triangulation pillar	National Trust-limited access, observe local signs
Mast	National Trust for Scotland
Wind pump / wind generator	
Windmill with or without sails	
Graticule intersection at 5' intervals	

## Using Scale

How to measure distance on a map -

As the crow flies:

The straight line distance between two places



Most maps have a scale. These help us to work out distances on maps. This is given by the scale statement (eg 1:25,000) and/or by showing a scale bar.

The scale shows how much bigger the real world is than the map. If the scale is 1:50,000 it means that the map is 50,000 times smaller than the real world. For example, every 1 cm on the map represents 50,000 cm in the real world.

- Use a piece of paper and lay it down to join the two points.
- Mark the two dots onto the paper
- Lay the paper along the scale line to find the distance from the two locations.

By road:

Roads twist and bend so it is further than how the crow flies.

Use a piece of string and place it along the road from your original destination to your new destination.

Hold the piece of string, keeping it the correct length.

Place the string against a ruler and measure its length against the scale.



- ### Method to reduce water consumption
- Use a water meter (this charges people based on how much water they use rather than a 'flat' rate)
  - Increase the use of grey water (any domestic wastewater produced, excluding sewage – it could be used for things like watering the garden)
  - More efficient domestic appliances e.g. dishwashers
  - Rainwater harvesting - Captures rainwater from a roof and stores it in a large container for use at schools.
  - Build wells through digging or drilling
  - Protecting natural springs –Directing the spring to flow through a pipe to protect it.



- ### Renewable energy:
- Energy that can be re-made
- Solar Panels – Used to convert the sunlight to energy
  - Wind turbines – A generator converts wind into energy
  - Geothermal – uses underground heat to create steam which turns a generator
  - Biomass – Burning plants and animal waste.
  - Hydroelectricity – Uses water to turn turbines.



- ### Advantages
- Creates little pollution
  - Renewable energy will not run out
  - Low maintenance requirements
  - Often looks better than an energy plant

- ### Disadvantages
- High cost to install initially
  - Not always available
- EG: if not sunny, solar panels will not be able to collect water.
- Not available everywhere in the world.

- ### Resources we need to survive –
- Air – to breathe
  - Clean Water – to drink
  - Fertile soil – to grow crops
  - Wood and rocks – to build
  - Animals – to eat

- ### How can we use natural resources sustainably? –
- Actions to improve sustainability can operate at a number of levels.
- Local – by individuals, schools and communities, for example recycling resources as part of waste disposal or saving energy by using low-energy lightbulbs.
  - National – the UK Government has begun to encourage sustainable use of energy by offering incentives to companies and people to use renewable energy sources.
  - International – organisations like the United Nations are working with countries to encourage them to work together to tackle global issues. You will investigate actions at this scale in future units.



- ### Fossil Fuels-
- #### Advantages
- They generate large amounts of energy quite cheaply.
  - As technology improves, more reserves can be accessed.
  - Locating where fossil fuels are is quite easy.
  - Oil and gas can be transported through pipelines.
  - The means for extracting fossil fuels is already in existence.

- #### Disadvantages
- They release carbon dioxide when they are burnt, creating pollution.
  - Mining can create ugly scars on the landscape.
  - Mining can be dangerous.
  - Oil spills can cause environmental damage.
  - Supplies are running out and new sources are harder to get to. Oil and gas are both predicted to run out within 100 years.



- ### Describe the Distribution...
- When asked to describe the distribution use CLOCC. As a minimum use place names and compass points.
- Compass points
  - Longitude/ Latitude
  - Oceans
  - Continents
  - Countries



- ### Command Words:
- Analyse** - Take apart an idea, concept or statement and criticise it.
  - Assess** - Come to a conclusion about the overall value or significance of something; discuss its positive and negative aspects to show balance.
  - Compare** - Identify similarities and differences.
  - Define** - State the meaning of an idea or concept.
  - Describe** - Set out the main characteristics of something; DON'T EXPLAIN.
  - Discuss** -Set out both sides of an argument (for and against) and come to a conclusion; there should be some evidence of balance.
  - Evaluate** - Make a judgement about the effectiveness of something; discuss its strengths **and** weaknesses and come to a conclusion about its overall success or importance.
  - Explain** - Give reasons why something happens.
  - Give** - Produce an answer from recall.
  - Justify** - Support an idea or argument with evidence; for the outcome chosen, the positives must outweigh the negatives.
  - State** = name

### How to revise:

To revise you should reduce these notes further, use colour and images. You could make a mind map/ poster/ revision cards/notes/ presentation/ song/ answer the following questions.

1. Define weathering
2. Name the 5 types of earths spheres
3. On the diagram to the right, annotate the layers of the earth.
4. State the 5 main natural resources humans need in order to survive,.
5. Is coal a renewable or non-renewable form of energy.
6. Using the picture on the right, describe a soils profile.
7. Describe the water cycle.
8. Explain the formation of coal.
9. Explain how sedimentary rock is formed
10. Identify two natural resources and describe how humans make use of them
11. Assess the importance of using renewable energy sources.
12. Evaluate whether renewable or non-renewable energy sources are more reliable.



- ### Key Words-
- Natural Resources* – Materials found un nature that we need in order to survive
  - Renewable energy* - Replaced by the natural processes of the Earth's spheres, which take place in less time than an average human life
  - Non-renewable energy* - Some resources take millions of years to be replaced naturally. Within a human's lifetime these resources would seem like they are never replaced.
  - Fossils* - Remains or traces of ancient life that have been preserved by natural processes
  - Weathering* - When rocks are broken down. There are 3 types of weathering; mechanical, chemical and biological
  - Soil* - A thin layer on the Earth's surface between the lithosphere and biosphere. It is a layer of minerals, water and organic matter that forms from the weathered rock below, and decaying vegetation above.
  - Ecosystem* - interconnected community of all of the living things and all of the non-living parts
  - Sustainable* - The ability to meet the needs of the current population without stopping future populations to meet their own needs.

## Types of economy –

**Primary** - This is the process of getting the raw materials together



**Secondary** - This is the using the raw materials to create a new product



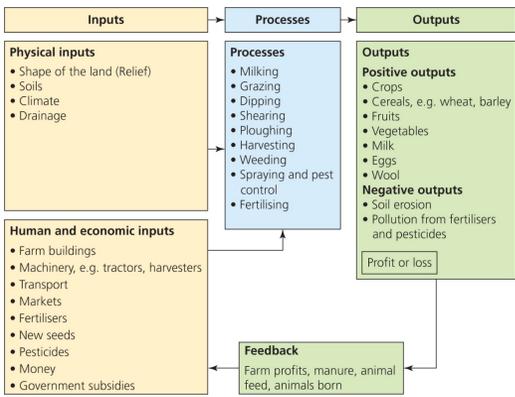
**Tertiary** - Using or selling this new product



**Quaternary** - Research and development

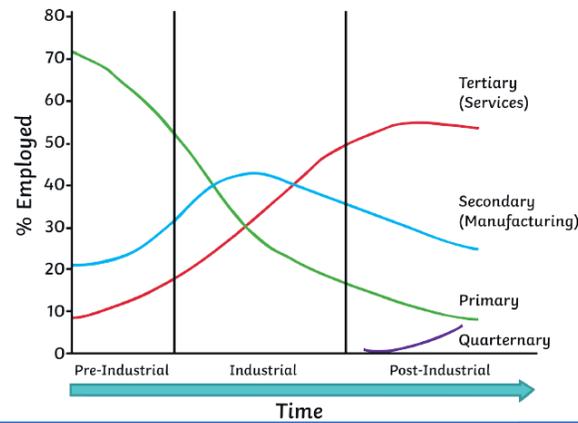


## Farm as a system –



## The UK's economic structure

A country's employment structure describes how jobs are divided between these four sectors. The employment structure of a country can change over time. The graph shows how these sectors have changed over time.



**Primary** - slowly decreased since pre-industrial time.  
**Secondary** - Increased before the industrial times and decreased after.  
**Tertiary** - increase in tertiary sector which stopped growing in the post - industrial times.  
**Quaternary** - introduced in post-industrial

A system describes the way in which something is carried out. Each system is made up of:

- inputs:** physical, human and economic inputs which enable the system to work
- processes:** the activities that take place to produce the outputs
- outputs:** the end results of the inputs and processes, which can be sold
- feedback:** the elements that can be put back into the process for it to continue and improve.

## Why has manufacturing declined?



New technologies such as robots replacing people in modern industry



Competition from other countries such as China, which can produce goods cheaper as labour is less expensive

## What is a port?

A port is a location on the coast that provides facilities for ships to load and unload their cargo. A port must have:

- a large area of sheltered water, plenty of flat land
- good transport links
- Nearby labour force



## Types of farms –

A farm is an area of land and its buildings where crops are grown and/or livestock are kept

- Arable farms** - where crops are grown, e.g. wheat and barley
- Subsistence farming** - is where a farmer is only growing enough to feed their family
- Pastoral farms** - where animals are raised, e.g. cattle and/or sheep
- Mixed farms** - where crops are grown and animals are kept
- Market gardens** - where fruits, vegetables and flowers are grown.

**Diversification** – when a farmer adds new money making activities to the typical farming activity.

- Pick your own crops
- Shooting
- New animals
- Wind turbines
- Camping

## Why has the tertiary sector grown?



**Tourism** – Cheap and quick transport and introduction of paid holidays meant workers could afford a week's holiday away from home.

## Nissan –



In 1984, the Japanese car company Nissan decided to locate its first European factory near Sunderland. This was because the government offered a financial investment of £40 million to provide jobs.

In 1986, Nissan Motor Manufacturing UK employed slightly less than 500 people and built 5,000 cars.

In 2016 this had risen to 7,000 employees and produced 500,000 vehicles.

**Faurecia** (France): parts for seats (e.g. tracks, recliners, height adjusters) from Portuguese, Polish and French factories  
**NSK** (HQ Japan): power assisted steering from Polish factory  
**Denso** (Japan): compressor from German factory; crank sensor from Japanese factory



**Bridgestone** (Japan): tyres from Polish and Spanish factories  
**ZF Friedrichshafen** (Germany): shock absorbers, electric park brakes, airbags, camera systems, steering wheels from factories all over the world  
**Sogefi** (Italy): suspension coil springs – front from UK factory; rear from Spanish factory

## Origins of parts used in cars built in the UK

UK 41%      Rest of the world 59%

## Destination of production from Nissan's Sunderland plant

UK 20%      EU 55%      Rest of the world 25%

## Globalisation -

The way in which the world has become more interconnected. It refers to how people communicate as well as world trade, international investment and the sharing of ideas.

Factors that encourage globalisation:

- Transport developments: Container ships and air travel make it easy to transport goods
- ICT developments: The internet allows people and businesses to communicate instantly and mobile phones enable people to communicate wherever they are.



**A multinational company (MNC)** = business that operates in at least one country other than its home country.



## What impacts where factories should be located?



Skilled workforce – When there was a decline in manufacturing people were trained and ready to work



Communication – Close to the ports and railway which allows transport to Europe.



UK Government support – Grants and financial incentives to provide local jobs



Large plot of land – Areas of land that allow the product to be tested and built.



**FAIRTRADE**

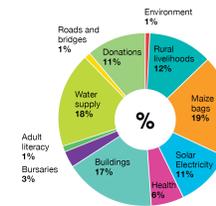
Fairtrade is about better prices and decent working conditions for farmers and workers in the developing world. It happens by making companies pay prices that never fall lower than the market price. Each year Fairtrade pay a premium to communities which is spent how the locals wish.



Satemwa tea estate, Malawi

Process 2500 tonnes of tea per year.

- Solar power – 600 homes have power which allows people to work at home
- Education - 3 new classroom blocks and desks for Primary School
- Health – Malaria drugs/ nets



## Command Words:

**Analyse** - Take apart an idea, concept or statement and criticise it.

**Assess** - Come to a conclusion about the overall value or significance of something; discuss its positive and negative aspects to show balance.

**Compare** - Identify similarities and differences.

**Define** - State the meaning of an idea or concept.

**Describe** - Set out the main characteristics of something; DON'T EXPLAIN.

**Discuss** - Set out both sides of an argument (for and against) and come to a conclusion; there should be some evidence of balance.

**Evaluate** - Make a judgement about the effectiveness of something; discuss its strengths **and** weaknesses and come to a conclusion about its overall success or importance.

**Explain** - Give reasons why something happens.

**Give** - Produce an answer from recall.

**Justify** - Support an idea or argument with evidence; for the outcome chosen, the positives must outweigh the negatives.

**State** = name

## Key Words-

**Balance of Trade** = The difference between the money a country earns from its exports, and the money it pays for its imports

**Disposable Income** = income remaining after deduction of taxes, available to be spent or saved as one wishes.

**Diversification** – when a farmer adds new money making activities to the typical farming activity.

**Employment Structure** = describes how jobs are divided between the economic sectors

**Exports** = Those that a country sells

**Factory** = a building where goods are made

**Fairtrade** = trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.

**Globalisation** - the process by which businesses start operating on an international scale.

**Imports** = The raw materials, goods and services that a country buys

**Labour** = workers

**Location** = a particular place or position

**Manufacture** = the action of making things from components or raw material

**Port** = a location on the coast that provides facilities for ships to load and unload their cargo.

**Production** = make (something) on a large scale using machinery.

**Profit** = a financial gain, especially the difference between the amount earned and the amount spent in buying

**Stakeholder** = a person with an interest or concern in something

**System** = a set of things working together as parts of a mechanism

**Tourism** = operation of holidays and visits to places of interest.

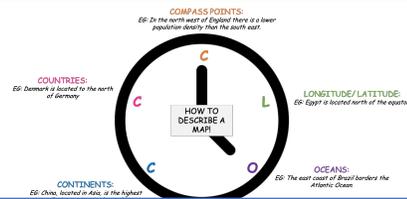
**Trade** = the buying and selling of natural resources, manufactured goods and services.

## Describe the Distribution...

When asked to describe the distribution use CLOCC.

As a minimum use place names and compass points.

- Compass points
- Longitude/ Latitude
- Oceans
- Continents
- Countries



## How to revise:

To revise you should reduce these notes further, use colour and images. You could make a mind map/ poster/ revision cards/notes/ presentation/ song/ answer the following questions.

1. Define globalisation
2. I am a type of farm that grows crops, what type of farm am i?
3. State the four types of economic sectors
4. What is a system? Can you name an example of a system?
5. Define the tertiary sector
6. Name three ways a farm can diversify
7. Give four things that impacts where factories locate.
8. State how the primary sector is different to the secondary sector
9. Describe the changes in the economic sector using the graph to the right.
10. Describe how Fairtrade benefits its local community
11. Explain how the farm works as a system
12. Explain how the Fairtrade premium can be spent to improve the local community
13. Explain what features a port needs.
14. Explain how Nissan can be considered a multi-national corporation. Use the image on the right to help you.
15. Explain why the tertiary sector has grown.
16. Assess why manufacturing has declined.

