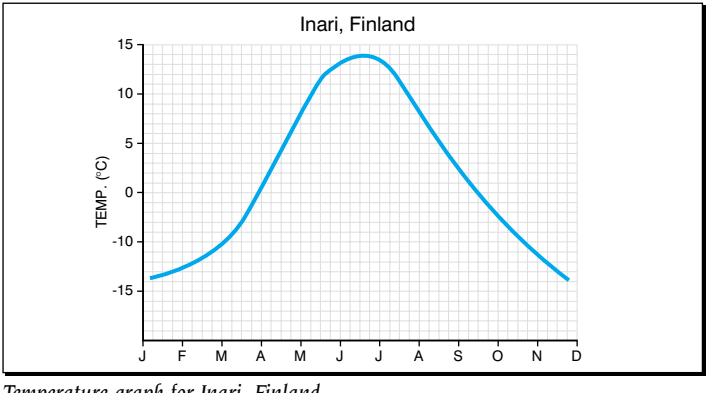
GEOGRAPHICAL SKILLS (1)

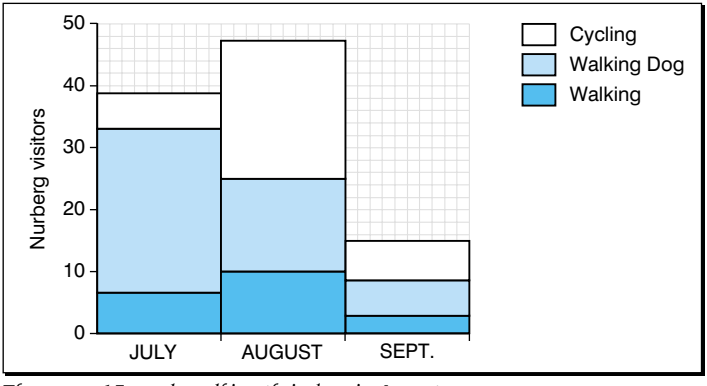
- GCSE geography examinations will test three main elements; recall of factual knowledge, understanding of concepts and processes, and geographical skills. The coursework component of the examination gives you the best opportunity to show your mastery of skills, but most questions in the written papers will have a skills-based section.
- Geographical skills include the drawing and interpretation of graphs, numbers, maps and diagrams. Marks will be given for the accuracy of your drawing, but there will be more marks for description and interpretation. Interpretation questions range from simple extraction of information from stimulus material to description and to analysis and evaluation.
- The four major types of graph tested at GCSE are line, bar (or histogram), scatter and pie. If asked to draw any of these it is important to do it accurately. The degree of toleration allowed is quite small. Use a sharp pencil and a ruler.
- Use line graphs to plot continuous data, e.g. temperature, population. Plot the points accurately and join them by a continuous line – either freehand or using a ruler.



Temperature graph for Inari, Finland

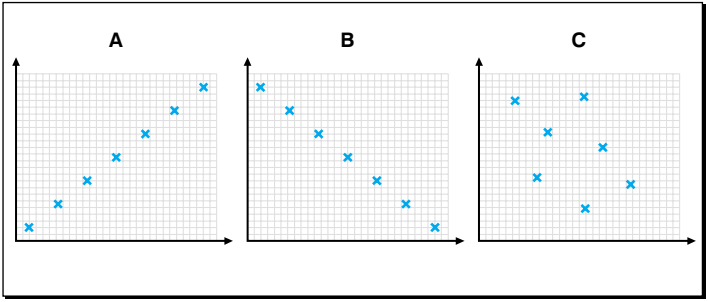
GEOGRAPHICAL SKILLS (2)

- Plot discontinuous data on a bar graph, e.g. rainfall. Again, plot the data as accurately as you can.
- Proportional or divided graphs are useful for displaying more than one set of information. When reading these graphs it is important to remember that the start of each sub-division is the base line from which to read figures.



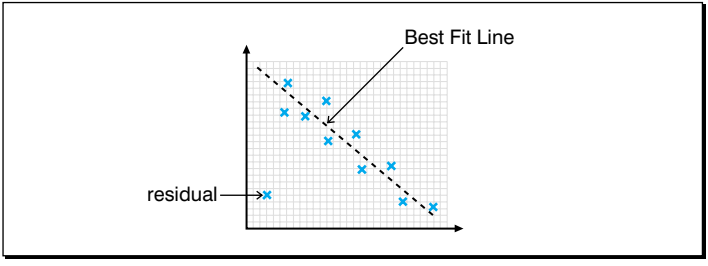
There were 15 people walking their dogs in August.

- Use scatter graphs to show the relationship between two sets of figures. On a scatter graph it is the pattern that the points make that it is important, so do not join up the points. If there is a clear pattern do not assume automatically that one feature caused the other. There are examples of scatter graphs on side 3 of Geographical Skills.
- There is a wide range of uses for scatter graphs in geography. Examples include relationships between latitude and temperature; GNP and infant mortality, and application of fertiliser and yield of crops.



Typical scatter graph patterns (or correlations).

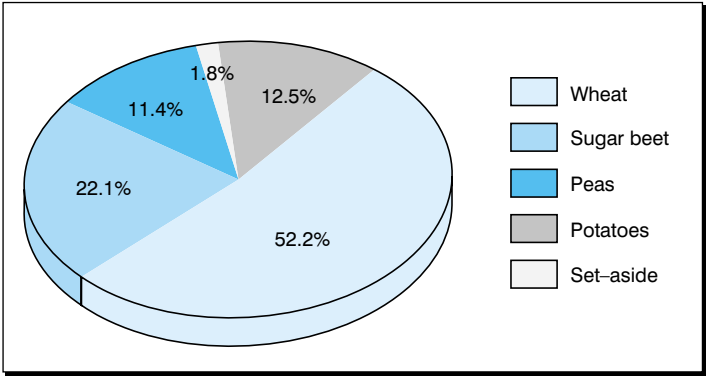
- In the graphs above there is a positive link in A because one variable increases with the other. In B the link is negative because one variable increases as the other decreases. If the points form a straight line then there is a perfect relationship. This is very unusual. The trend in the points can be shown by a best-fit line (see below). Residuals are obvious exceptions to the trend. In C (above) there is no relationship at all.



Line of best fit for a scatter graph pattern

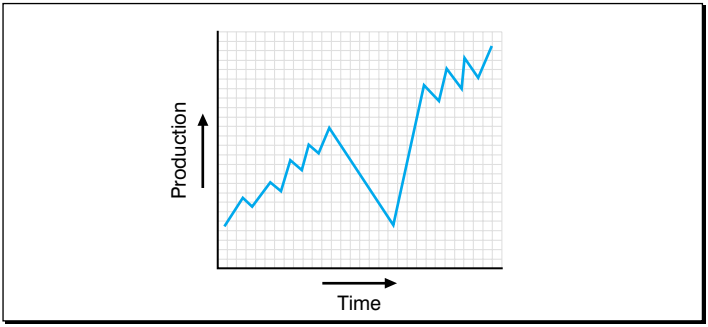
GEOGRAPHICAL SKILLS (4)

- Pie graphs show proportions. Figures which need to be presented in a pie chart must be converted to percentages first.



Pie chart to show land use in Grange Farm

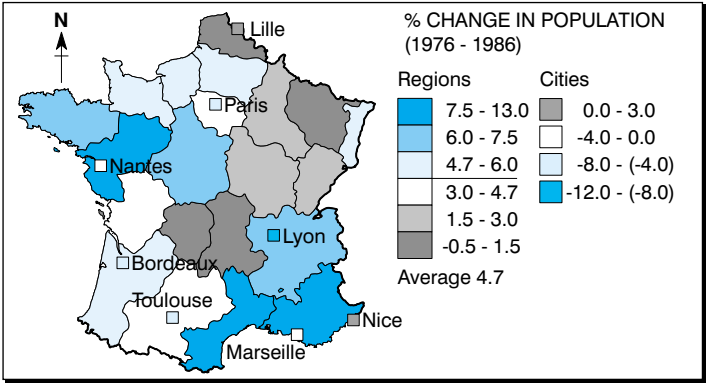
- Many GCSE questions start with a map, a diagram or a piece of text – so-called stimulus material. The question will ask for information contained in this material. Make sure that you extract information accurately. If a key is provided use the precise wording given including any units. For these questions no credit is given for any information that has not been taken from the stimulus material.
- A very common skills-based question is to ask for a description of a pattern made by some geographical feature. The question may be based on a map, a graph or a set of figures. The pattern should be considered from the general, the specific and the exceptional point of view. Give the overall trend or picture first, followed by specific details. State any exceptions to the general rule last and comment on them. The graph on side 5 shows how the production of a particular commodity has changed over time.



Production of a commodity over time

- Using the general/specific/exceptional rule:
  From the graph you can tell there has been a general rise in production over the years. The rise has not been steady. There has been a series of small-scale fluctuations which occur every few years. There was a major fall in output during one year.
- Atlas maps show patterns using chloropleth maps. The darker the colour the greater the value. Patterns in chloropleths can be described in the same way. Describe the general pattern that strikes you when you first look at a chloropleth map. Then list specific details that support this pattern together with any exceptions. Merely restating facts and figures does not show the examiner you can appreciate a pattern.
- Consider the following question:
  Describe the pattern of population change in France between 1976 and 1986.

  A possible answer is given on the reverse side of this card.



Population changes in France

- A possible answer to the question on the reverse side of this card could be:
  In general the areas of greatest population increase are in the north, west and south of the country. The south coast and the region around Nantes experienced population increases between 7.5 and 13.0%. The area of greatest loss was in the centre of France and in the North-east. The most central areas of France and two areas in the North-east, including the area around Lille, have seen a population decline of between 0.5 and 1.5 %. (This describes the general pattern with specific details illustrating the points made.) Exceptions to the general pattern are the areas around Paris and Toulouse, and the area north of Bordeaux where increases of only 3-4.7% are lower than expected. The population changes in the area to the extreme east of the country, with an increase between 4.7 and 6%, is higher than the surrounding areas.
- Notice that figures are quoted only to make a particular point. Previous knowledge of the geography of France is not necessary. Use only locations shown on the map. Compass directions should be used to refer to parts of the map.

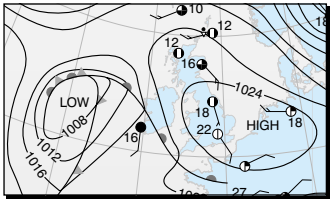
Geographical skills (1–6)

1 Study the weather chart.

i Is high or low pressure covering England and Wales? (1)

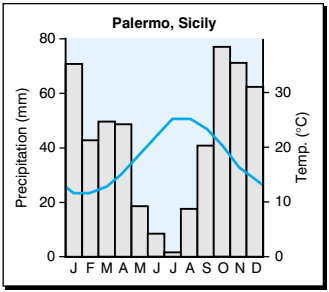
ii What kind of weather system is this? (1)

iii Using the weather map only, describe how the weather is likely to change if the weather system located west of Ireland moves east over England and Wales. (4)



1200 GMT 23 June 1994

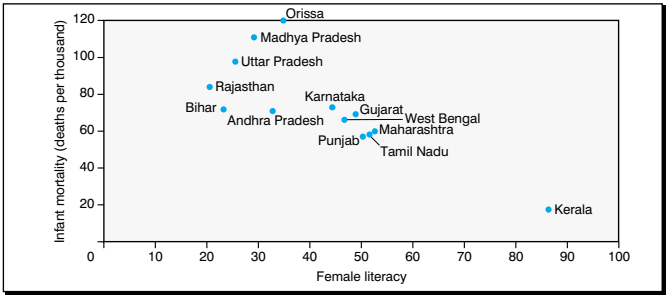
2 Describe the climate of Palermo using the climate graph. (8)



3 **i** What kind of graph is the one below? (1)

ii Why is it suitable for this information? (2)

iii Describe the pattern in the graph. (3)



SCORE

1 **i** High pressure. (1)

ii An anticyclone. (1) You need to be able to recognise both an anticyclone and a depression on a synoptic weather chart.

iii The temperature will drop from 18–22°C to about 16°C. (1) The wind will strengthen slightly. (1) It will change from a south-easterly to a south-westerly direction. (1) The sky will get cloudier. (1) It is very important that you use only the information shown on the weather map.

2 The hottest month is August with a temperature of 25°C. (1) The coolest month is January with a temperature of 12°C. (1) The temperature range is 13°C. (1) There is a marked winter maximum of precipitation. (1) The driest months are June and July. (1) March and April are wetter than the rest of spring. (1) October and November are abnormally wet autumn months. (1) October is the wettest month, averaging 78mm. (1) Make sure you refer to both patterns in temperature and precipitation.

3 **i** Scatter graph. (1)

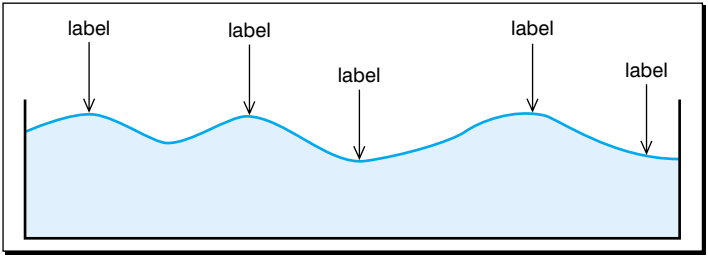
ii It plots the relationship (1) between two sets of data. (1)

iii There is a negative relationship between infant mortality and female literacy. (1) The relationship is quite strong as most points lie close to the line of best fit. (1) Orissa is the most obvious exception. (1) In an examination the figures will be carefully chosen so it is obvious whether or not there is a relationship!

TOTAL

Reading OS Maps (1)

- Most GCSE geography examinations include work on Ordnance Survey maps. This may be an entire question or a piece of stimulus within a question testing a particular part of the syllabus. The scales used are mostly 1:25,000 or 1:50,000. The questions test basic map reading skills, as well as description and interpretation of maps.
- The basic map reading skills concern four and six-figure grid references, measurement of distance, compass directions and map symbols. The map usually has a key so there is no need to learn the symbols off by heart.
- Questions will often ask you to draw annotated sketch maps or cross-sections. Cross-sections are useful for showing relief or a particular physical feature. Remember that a sketch map is a view from above, whereas a cross-section is a view from the side. Label cross-sections using arrows over the surface:



- Use technical terms such as convex/concave, dip/scarp, etc. when describing slopes. Use the correct technical terms for landforms too, e.g. valley, plateau, steep-sided hill. The closer together the contours the steeper the slope. Try to recognise distinctive landforms by the pattern of their contours. For examples of this, see the reverse side of this card.