

# **YEAR 7**

# **REVISION BOOKLET**

## **Assessment checklist**

1. To be able to define Geography.
2. Give examples of what we study in geography
3. Group what we study into the three major areas of geography
4. To be able to define and label the continents.
5. To be able to define and label the oceans
6. To be able to use an 8 direction compass.
7. To be able to describe the location of countries in Europe using cardinal points.
8. To be able to use a key
9. To be able to use a scale
10. To be able to read height on a map
11. To be able to use four figure grid references to describe the location of a point on a map.
12. To be able to use four figure grid references on an OS map.
13. To be able to use six figure grid references on an OS map.
14. To be able to recognise symbols on an OS map.
15. To be able to use scale on a OS maps
16. To be able to measure the distance between two six figure grid references on an OS map.
17. To understand how we can show relief on a flat surface.
18. To be able to use contour lines to work out how high places are.
19. To be able to use contour lines to draw cross sections of areas to scale.
20. To be able to describe a route using only an OS map.

# What is geography?

**Geography is the study of the world. It examines how people and nature interact.**

The study of geography can be split into **HUMAN, PHYSICAL & ENVIRONMENTAL**.

Here are some of the topics you will study in geography:

- Ecosystems
- Natural Hazards
- Map Skills
- Population and Migration
- Pollution
- Tourism
- Coasts
- Energy
- Rivers

## 1.0 Locational knowledge

### 1.1 World map

The world has **seven continents** and **five oceans**.

Europe is a **continent**. It is an area on the Earth that contains many different **countries**, including the UK.

The United Kingdom of Great Britain and Northern Ireland is made up of England, Northern Ireland, Scotland and Wales.

The countries are divided further into **regions**.

**Counties** are smaller areas. For example the counties of Dorset, Gloucestershire, Wiltshire, Devon and Cornwall are all part of the South West region.



**Map of the world's continents and oceans**



**Map of the countries in the United Kingdom**



Map of Europe










Geographers have traditionally used maps as a source of information about places. We can now use a range of technology to help us find places, eg satellite navigation, **GPS** and **GIS** on our computers or mobile phones.

A map is a two-dimensional drawing of an area. Maps help us to understand what places are like and how to plot routes.

Maps should have a:

- title
- scale
- north arrow
- key or legend

Symbol	Meaning
	Campsite
	Motorway
	Railway
	Railway station
	River
Sch	School
	Place of worship
P	Post office (rural areas only)
	Woods

## Symbols

Symbols help us to include lots of detail on maps that are drawn to **scale**. They include simple images, letters and abbreviations. Here are some examples:

## Direction, scale, distance and height

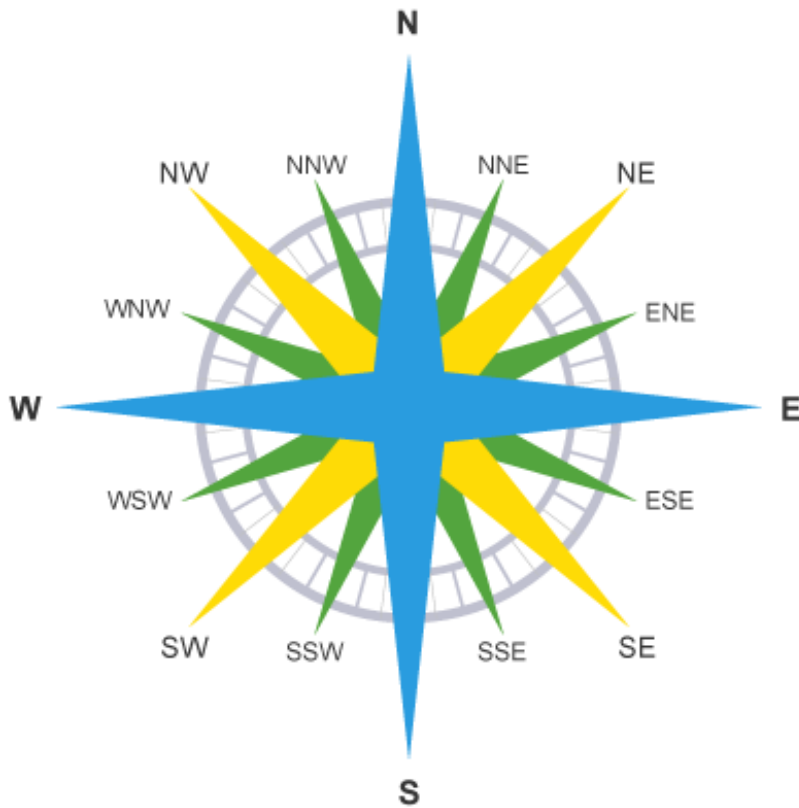
### Direction

Try to remember the main compass points by using a mnemonic, eg

**N**aughty **E**lephants **S**quirt **W**ater - **N**orth **E**ast  
**S**outh **W**est

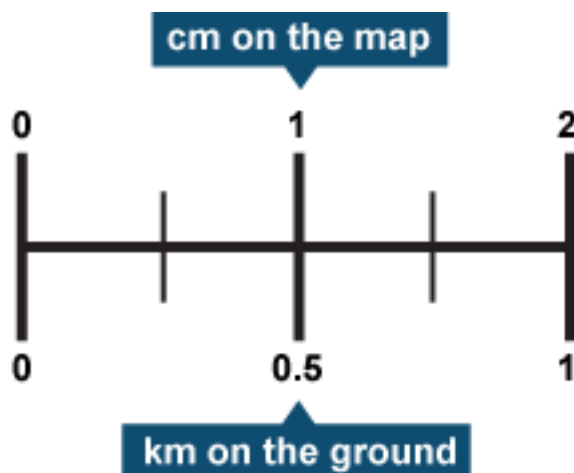
The four main points of the compass are north, east, south and west. Half way between each of these there are four other points: north-east, south-east, south-west and north-west. This makes an eight-point compass. There are a further eight points between these - remember the names of these are a mix of the two closest compass points but they always start with the main compass point, ie north, east, south or west.

Ordnance Survey maps are always printed so that north is at the top of the map.



## Scale and distance

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.





## How can distance be measured?

One of the most important uses for a map is to show how far one place is from another. This is best measured using the **scale line**.

### Straight line distances

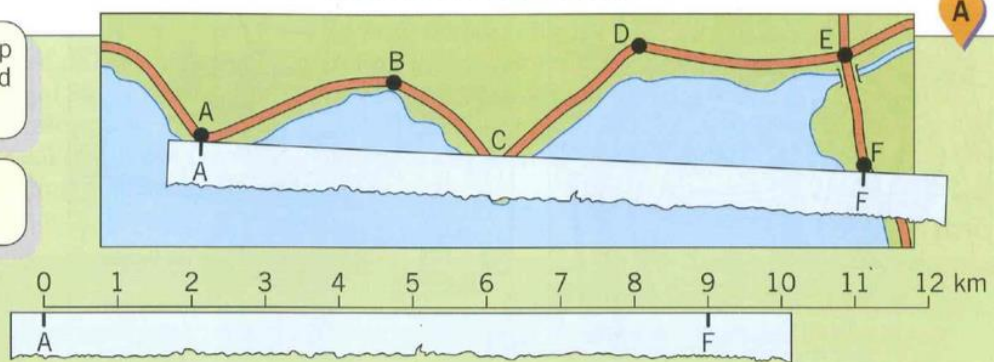
Straight line distance is easy to work out using a piece of paper with a straight edge.

Straight line distance is sometimes called 'as the crow flies'. It is the shortest distance between two points.

1 Lay the strip of paper on the map between the points to be measured (A and F).

2 Mark and label points A and F with a pencil.

3 Lay the paper along the scale line to find the distance from A to F. **It is 9 km.**



### Curved distances

The distance along a road or river with many bends on it is longer than the straight line distance. This is how to measure it.

1 Look at the length to be measured and break it into straight sections.

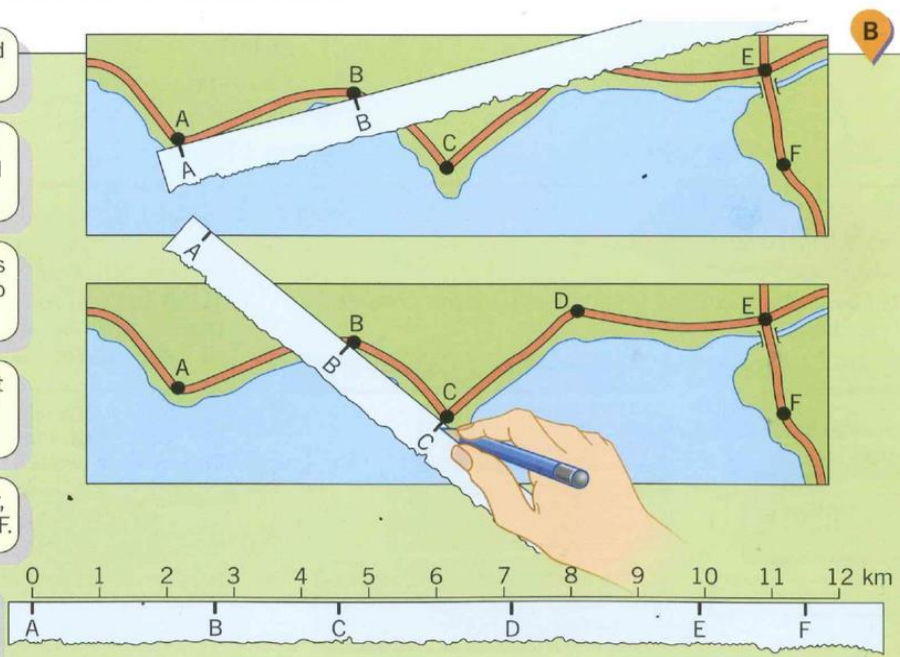
2 Lay the strip of paper along the first section A to B. Mark and label points A and B.

3 Pivot the paper at B so that it lies along the next straight section, B to C. Mark and label point C.

4 Now pivot the paper at C until it lies along the next straight section C to D. Mark and label point D.

5 Move along the road in this way, section by section, until you reach F.

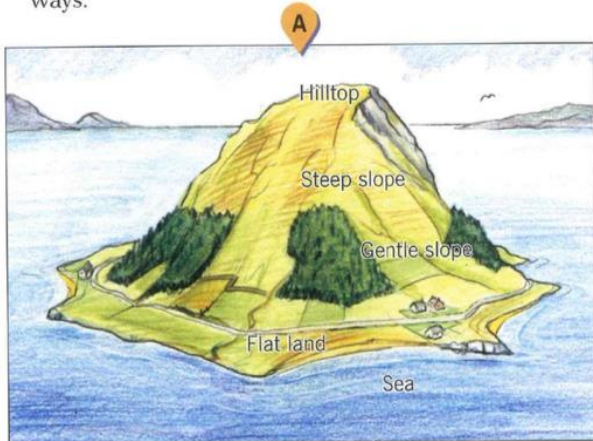
6 Lay the paper along the scale line to find the distance A to F. **It is 11.5 km.**



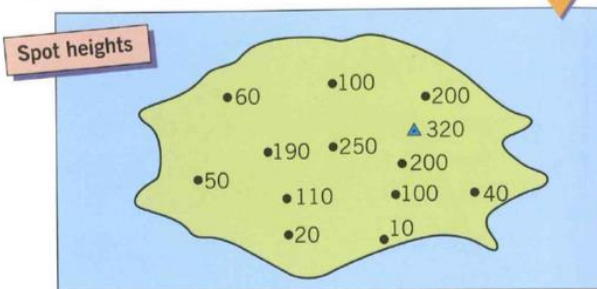
## How can we show height and relief on a map?

The land around us is seldom flat like a piece of paper. There are nearly always differences in height and differences in slope. Sometimes slopes may be gentle and at other times they are steep. There may be hills, mountains and valleys, or areas that are quite level. The word **relief** is used by geographers to describe the shape of the land.

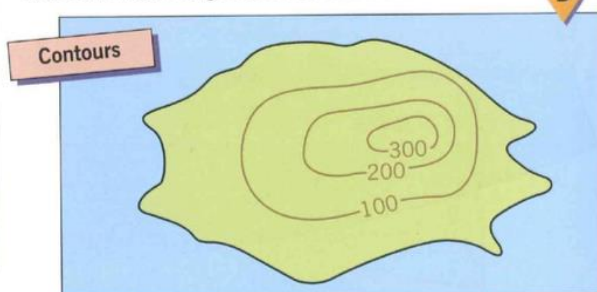
Map makers have to find ways of showing height and relief on a flat piece of paper. Look at drawing A which shows a hilly island. The land near the sea is flat or gently sloping but becomes quite steep towards the top of the hill. On a map this can be shown in three ways.



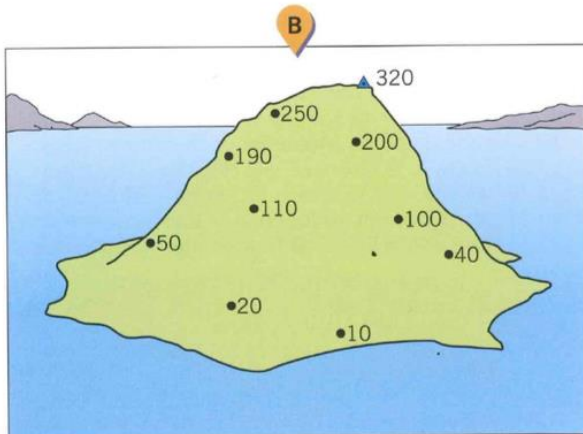
The heights can then be plotted on a map. They are usually shown as a black dot with a number giving the exact height above sea level in metres. They are called **spot heights**.



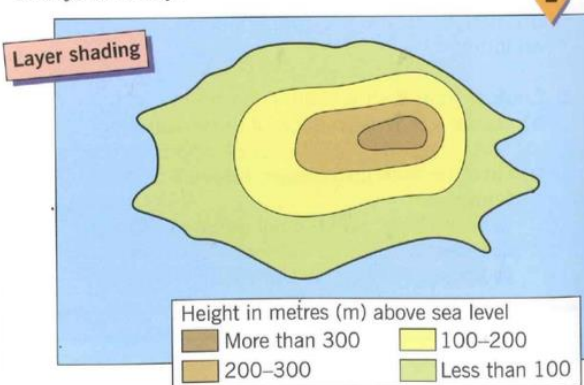
The map maker can then draw lines to join up the places that have the same height. These are called **contour lines**. They are usually coloured brown and have their height marked on them.



First, a surveyor must find the height of a number of places on the island. These are shown in drawing B.



Colours may be used to show areas of land that are at different heights. Brown is usually used for high ground and green for low ground. There must always be a key.





## How can we draw a cross-section?

When you look at a map it can be quite difficult to imagine what the landscape actually looks like. By using the contours, however, it is possible to draw a **cross-section** which shows an area in a more realistic way. A cross-section gives a cut-away or side view of the landscape. It shows the landscape as it would appear if it were sliced open, rather like cutting a large piece of cake in half. The diagrams below show how to draw an accurate cross-section from map B.



1 Decide on the line of your section. It is shown on map B.

2 Place the edge of a piece of paper along the line of the section.

3 Mark on the paper the start (A) and the finish (B).

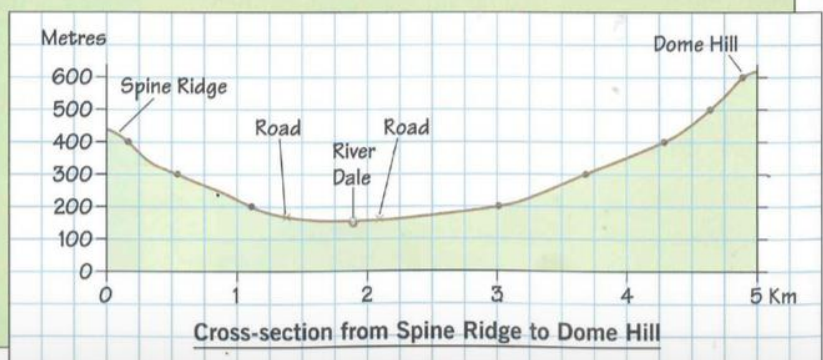
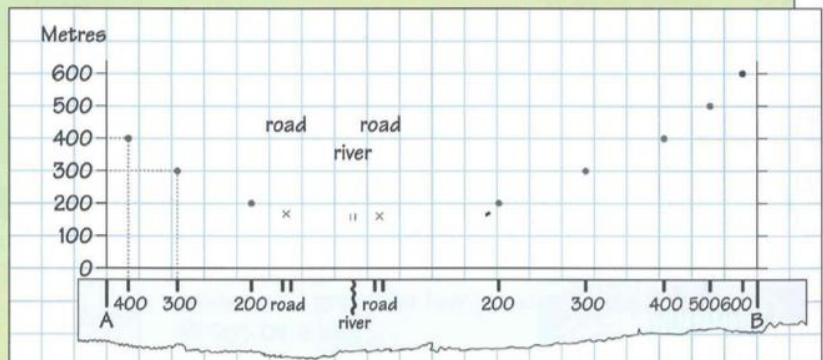
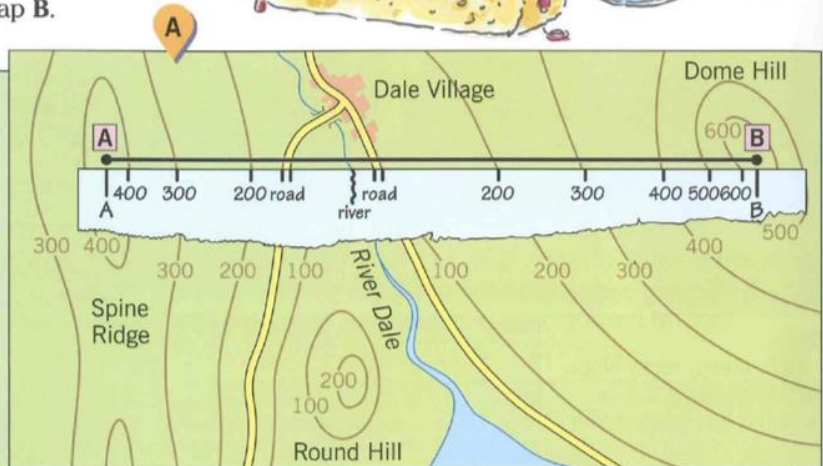
4 Carefully mark the points where each contour crosses the paper. Label their heights and mark other features such as rivers or roads.

5 Decide on a scale for your section. Choose one that shows the features of the landscape clearly but is not too exaggerated.

6 Mark the graph paper with small dots to show the height of the contours and positions of other features.

7 Join the dots with a smooth, freehand curve. Do not use a ruler. Notice the smooth curve for hilltops and valley floors.

8 Use arrows to help label any features, and add a title. Colour the section either brown or green.



# PRACTICE QUESTIONS

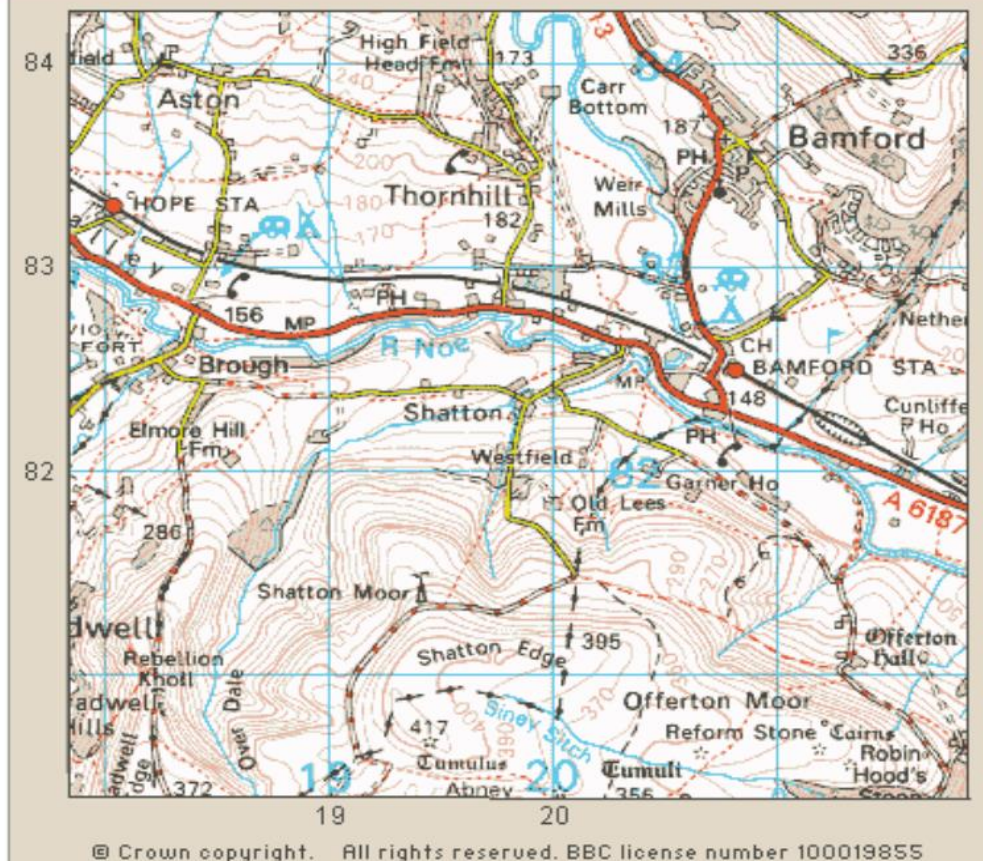
## Task 7: Using aerial photographs and maps (1 hour)



Use the map and photograph on the following 2 pages to help you answer these questions.

- 1) The aerial photograph is taken from the south west corner of the map looking towards Castleton. Which direction is the photo looking? \_\_\_\_\_
  - 2) What is the name of the ruined castle at R in the photograph?  
\_\_\_\_\_
  - 3) Why do you think the castle was built on this bit of land?  
\_\_\_\_\_
  - 4) What is the name of the steep sided valley in the photograph?  
\_\_\_\_\_
  - 5) Find the church labelled S on the photograph and the map. What symbol is used on the map to show this building? \_\_\_\_\_
  - 6) Locate V on the map and the photograph. What is the land here used for?  
\_\_\_\_\_
  - 7) Why do you think the land at V has not had houses built on it?  
\_\_\_\_\_
  - 8) What is the name of the road labelled T? \_\_\_\_\_
- 9) What type of farming do you think the land around the village is used for? Explain your answer. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 10) What is the name of the road at W? \_\_\_\_\_

## OS map: Hope Valley and Shatton Edge



Scale 1 cm – 0.5 KM

### Map skill questions:

1. Give a four figure grid reference for the telephone near Thornhill.  
.....
2. Give a four figure grid reference for the golf course.  
.....
3. Give a 6 figure grid reference for 1 of the camp sites.  
.....
4. What is the distance between Thornhill and Bamford?  
.....
5. Give OS symbols for the following:  
Golf course  
Telephone  
Campsite  
Information centre

--	--	--	--

6. What are contour lines?  
.....  
.....  
.....

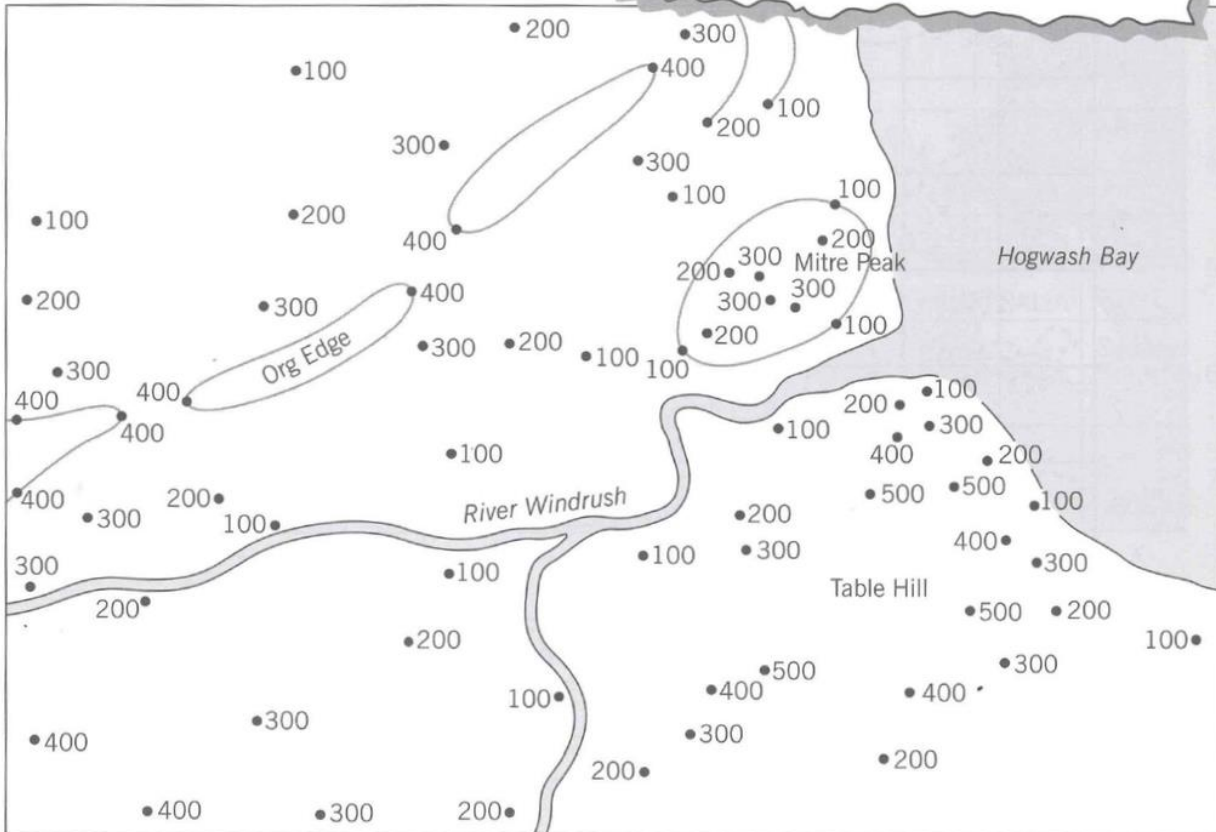


## Task 4: Height on Maps

All to complete

There are three main methods of showing height on a map. These are **spot heights**, **contours** and **layer shading**. Look at the map below. It shows an area where spot heights have been plotted. Some of the contours have also been drawn in.

- 1 **Spot heights** are numbers which show the exact height of a place.
- 2 **Contours** are lines which join up places with the same height.
- 3 **Layer shading** uses colours to show areas of land that are at different heights.



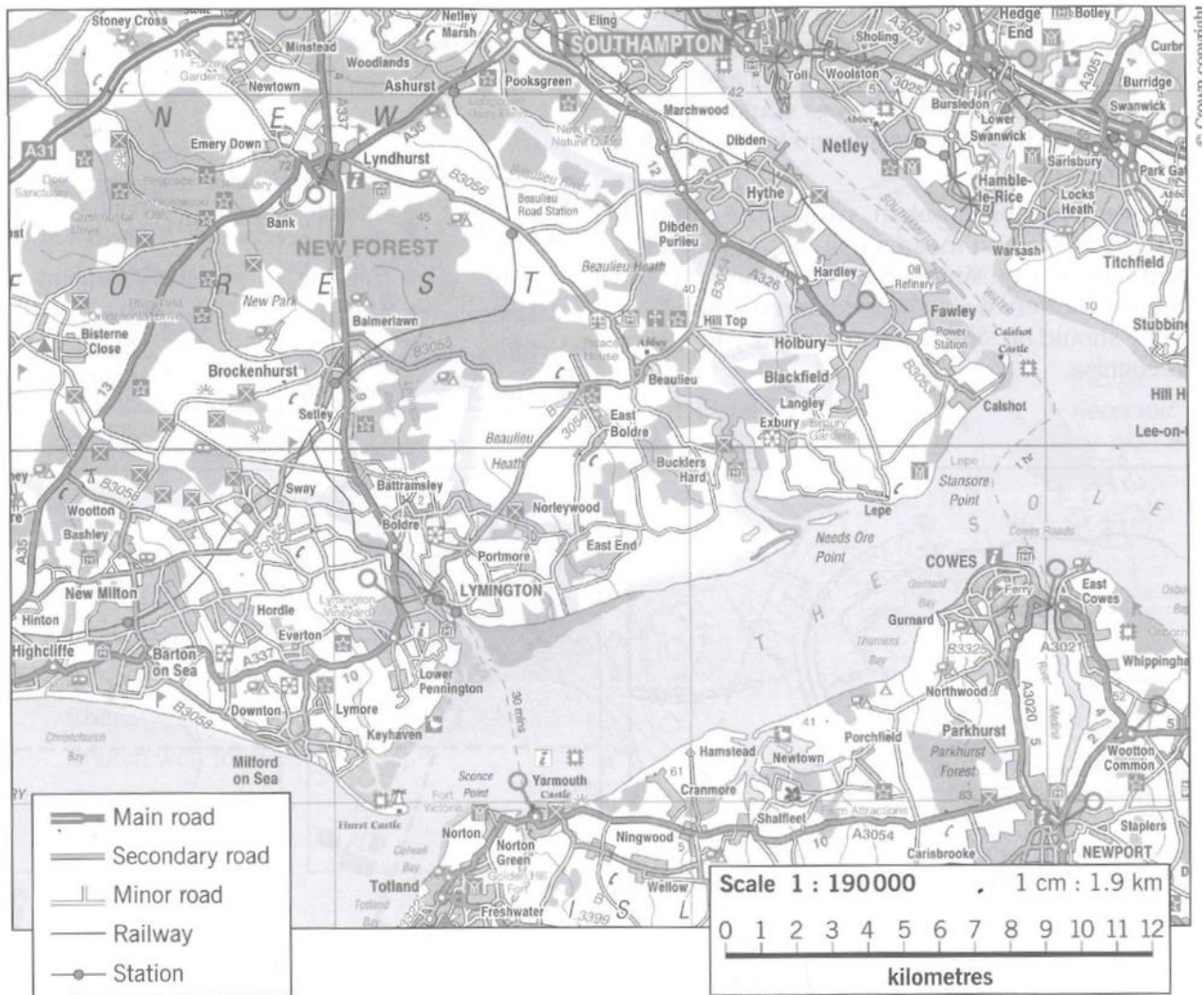
- 1 Complete the contour map as follows.
  - a) Complete the 100 metre contour line by joining the spot heights for 100 metres.
  - b) Draw the 200 metre contour line in the same way.
  - c) Draw in all the other contour lines.
  - d) Label each contour with its height value.
- 2 Complete the layer shading as follows.
  - a) Colour the key as shown.
  - b) Colour the land less than 100 metres in dark green.
  - c) Colour the land between 100 and 200 metres in light green.
  - d) Complete the layer shading using the colours in the key.

### Key

Height in metres above sea level

More than 400	<div style="width: 20px; height: 10px; background-color: #8B4513; border: 1px solid black;"></div>	Dark brown
300–400	<div style="width: 20px; height: 10px; background-color: #D2B48C; border: 1px solid black;"></div>	Light brown
200–300	<div style="width: 20px; height: 10px; background-color: #FFD700; border: 1px solid black;"></div>	Yellow
100–200	<div style="width: 20px; height: 10px; background-color: #90EE90; border: 1px solid black;"></div>	Light green
Less than 100	<div style="width: 20px; height: 10px; background-color: #008000; border: 1px solid black;"></div>	Dark green





- How far is it by boat from:
  - Lymington to Yarmouth?
  - Yarmouth to Cowes?
  - Cowes to Southampton?
- How far is it by road from:
  - Lymington to Lyndhurst?
  - Yarmouth to Cowes?
  - Fawley to Southampton?
- How far is it by rail from Ashurst station to Lymington station?
- John lives in Lyndhurst. To visit his friend he follows this route: Drive down the A337 south for 5 km then turn left. Follow this road for 7 km then turn sharp right. After 4.5 km turn left on to a minor road. Follow this for 2 km. Where does John's friend live?
- John's dad drives to work by this route: Take the B3056 out of Lyndhurst for 5 km. Turn left and follow the minor road to a roundabout. Turn right and drive for 7.5 km down the A326. Turn left at the roundabout and follow the B3053 for 3 km. Where does John's dad work?

Use the images on the next page to help you answer these questions

1) The aerial photograph is taken from the south west corner of the map looking towards Castleton. Which direction is the photo looking? \_\_\_\_\_

2) What is the name of the ruined castle at R in the photograph?

\_\_\_\_\_

3) Why do you think the castle was built on this bit of land?

\_\_\_\_\_

4) What is the name of the steep sided valley in the photograph?

\_\_\_\_\_

5) Find the church labelled S on the photograph and the map. What symbol is used on the map to show this building? \_\_\_\_\_

6) Locate V on the map and the photograph. What is the land here used for?

\_\_\_\_\_

7) Why do you think the land at V has not had houses built on it?

\_\_\_\_\_

8) What is the name of the road labelled T? \_\_\_\_\_

9) What type of farming do you think the land around the village is used for? Explain your answer. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

10) What is the name of the road at W? \_\_\_\_\_

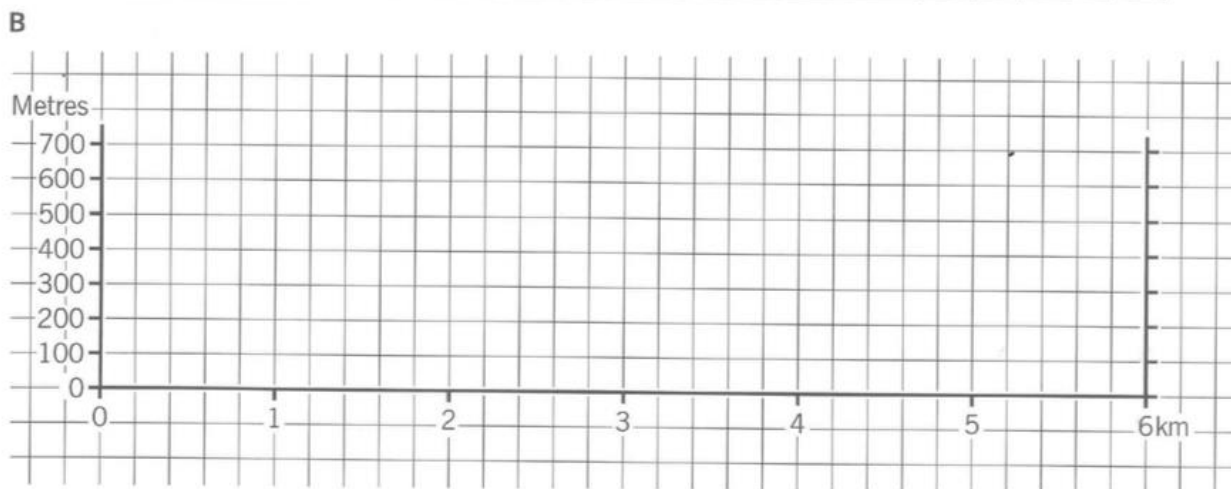
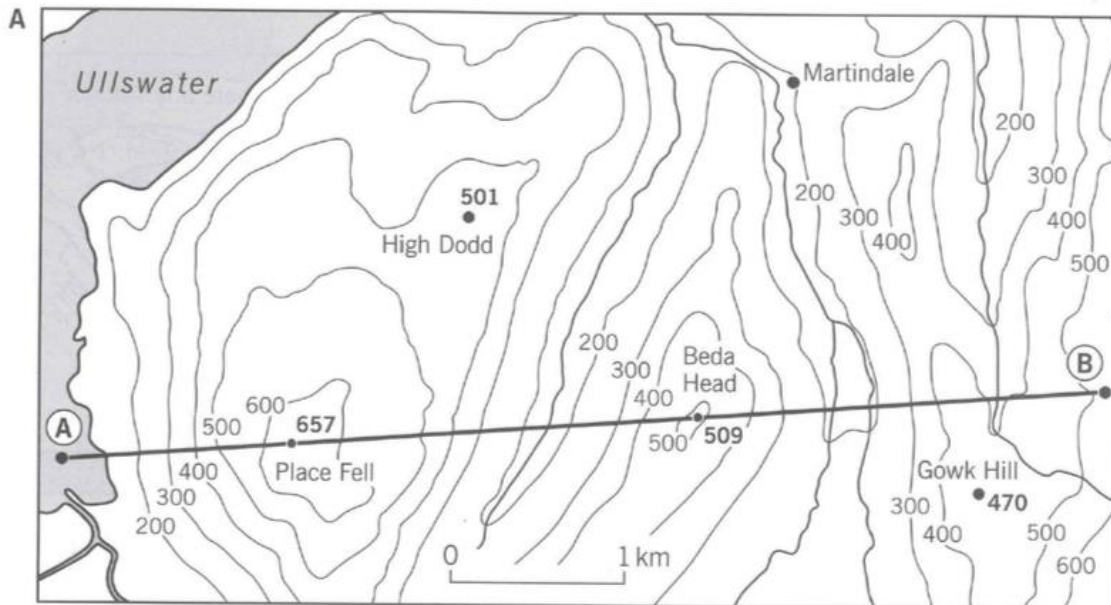




## Task 5: Drawing cross sections (20 mins)

Look at map A showing part of the Lake District. The area is very rugged with high mountains and steep-sided, narrow valleys. Look carefully at the contours drawn on the

map and try to identify the hills and valleys. A cross-section is a good way of showing the relief of an area like this.



- 1 Draw a cross-section from point A on Ullswater to point B near Gowk Hill.
  - a) Use the cross-section outline in drawing B.
  - b) Mark and name the features along the cross-section.
  - c) Colour the section either brown or green.
- 2 Look at your completed cross-section.
  - a) What is the highest point on the section?
  - b) What is the lowest point on the section?
  - c) Where is the steepest slope?
  - d) Which feature is a rounded hill?
  - e) Which feature is a steep-sided ridge?



## Task 6: Six Figure Grid References (30 mins)

Silver

Gold

We can find or **locate exact points** on a map by using **six numbers or figures**.

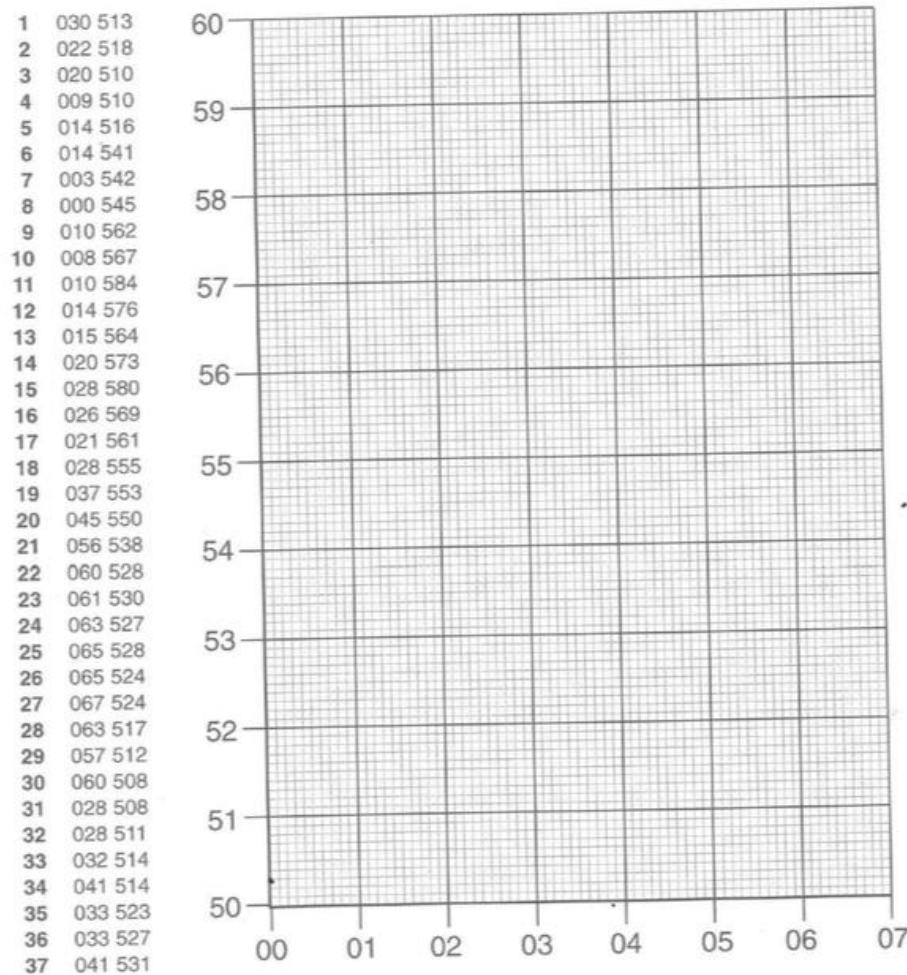
- The **first three** numbers tell us how far to go along the bottom or top of the map. The **third** number tells us the number of **tenths** of a grid square.
- The **last three** numbers tell us how far to go up the sides of the map. The **sixth** number tells us the number of **tenths** of a grid square.

On a map you will have to **estimate** the tenths of each grid square.

In this activity the tenths have been marked on for you.

### Activities

- 1 Use the following **six figure grid references** to plot points 1 to 37 on the grid below. Join them up as you go to show a mystery creature.



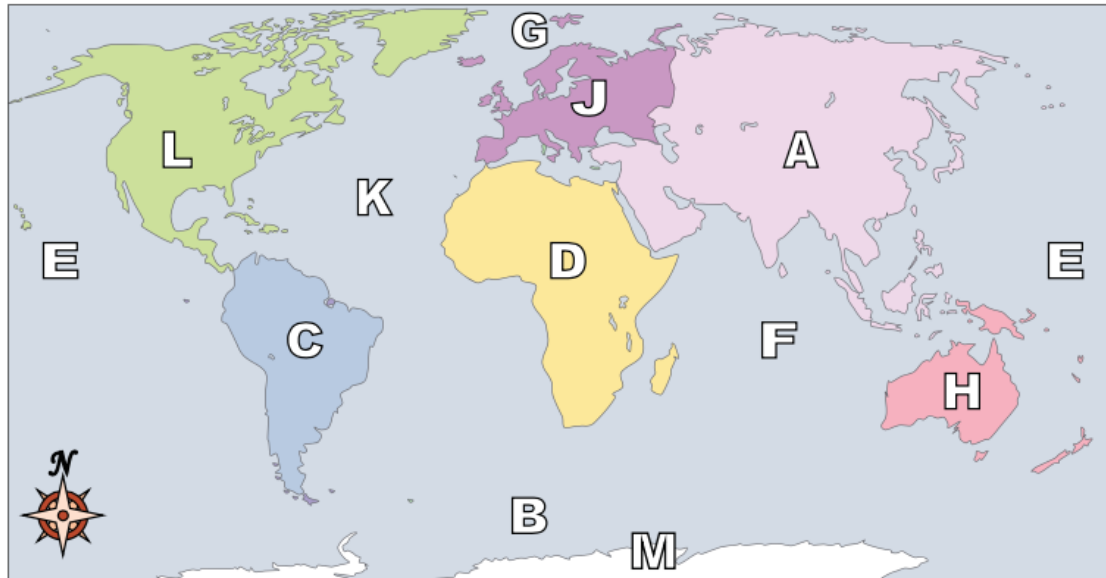
- 2 Give the creature a triangular-shaped eye. Write down the six figure grid references of the three corners of the eye.

1 \_ \_ \_ \_ \_

2 \_ \_ \_ \_ \_

3 \_ \_ \_ \_ \_

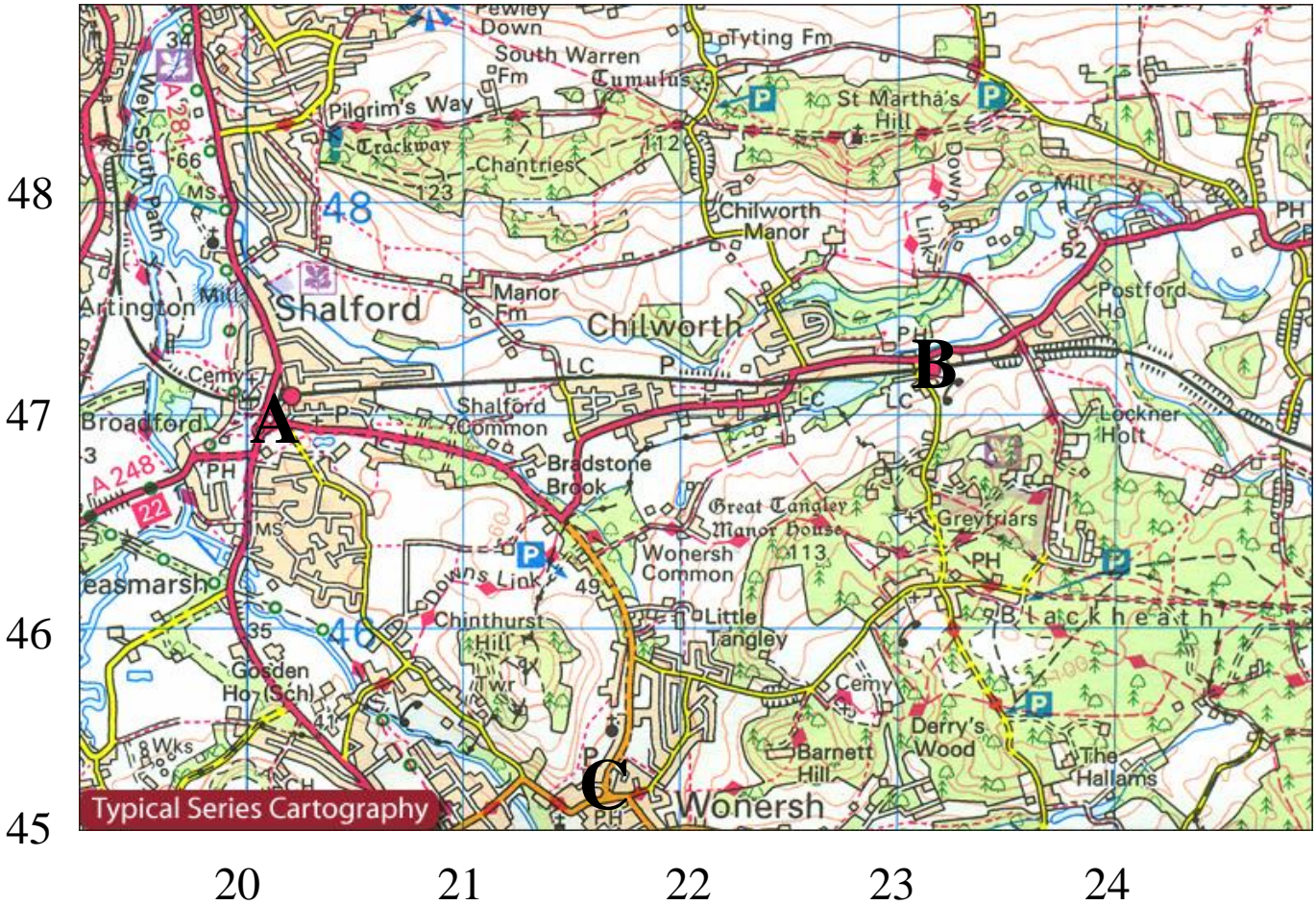
Using the map below, determine which letter represents each continent or ocean.



- 1) North America \_\_\_\_\_
- 2) South America \_\_\_\_\_
- 3) Europe \_\_\_\_\_
- 4) Asia \_\_\_\_\_
- 5) Africa \_\_\_\_\_
- 6) Australia \_\_\_\_\_
- 7) Antarctica \_\_\_\_\_
- 8) Pacific Ocean \_\_\_\_\_
- 9) Atlantic Ocean \_\_\_\_\_
- 10) Indian Ocean \_\_\_\_\_
- 11) Arctic Ocean \_\_\_\_\_
- 12) Southern Ocean \_\_\_\_\_
- 13) Which of these continents is closest to Africa?
  - A. Antarctica
  - B. North America
  - C. Europe
  - D. Australia
- 14) Which continent is not touching any other continents?
  - A. Asia
  - B. Antarctica
  - C. Africa
  - D. North America
- 15) Which continent is touching the eastern border of Europe?
  - A. North America
  - B. Australia
  - C. Africa
  - D. Asia
- 16) Which ocean touches Africa's western border?
  - A. Arctic Ocean
  - B. Pacific Ocean
  - C. Indian Ocean
  - D. Atlantic Ocean
- 17) Which ocean touches Africa's eastern border?
  - A. Atlantic Ocean
  - B. Indian Ocean
  - C. Pacific Ocean
  - D. Arctic Ocean



## Plan your own route



You have decided to go on a walk with some friends. Study the map extract above of the Isle of Wight, which shows the two routes you can choose for your journey, from A to B or A to C.

**SCALE: 4cm = 1km**

Note:

The following shows the average walking speed for a person:

**On flat ground: 1 hour to travel 4km**

## On steep ground: 1 hour to travel 3km

Describe the route you would choose

- Give the 6 figure grid reference of the starting and finishing point of your journey.
- The direction you are travelling.
- The steepness/Gradient of land.
- Distance Travelled.
- Time taken.

I would choose the route \_\_\_\_\_.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.