

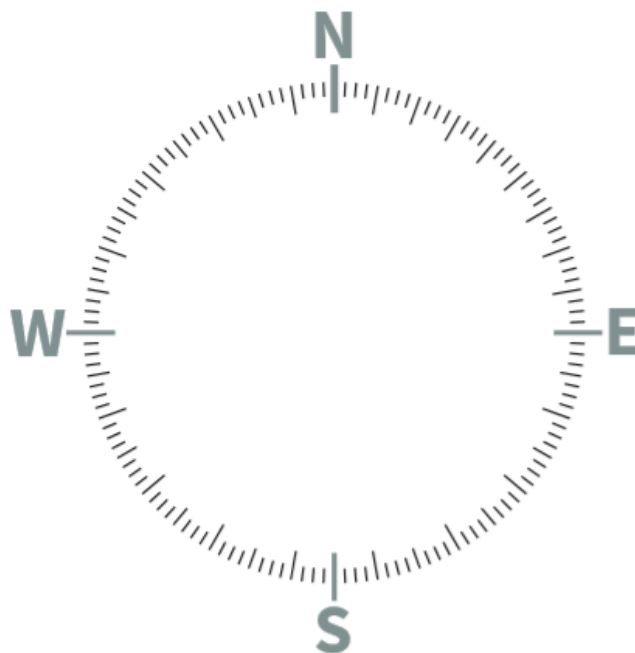
## Using a Compass and Understanding Contours on a Map

### Using a Compass

#### Which direction am I going?

Just as it is important to know which is your left and your right hand, in map reading it is important to understand where north, east, south and west are. You can remember where the points of the compass are by using one of these rhymes:

**N**aughty **E**lephants **S**quirt **W**ater or  
**N**obody **E**ver **S**wallows **W**hales



If you are walking in a direction half way between two of the points of a compass, you can say you are heading north-east, south-east, south-west or north-west, depending on the direction.

#### **Top tip!**

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

## Task 1

Using the Map of Dovedale on our webpage, answer the following questions.

1a. Which general direction are you heading if you are walking from point 1 to point 2?

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1b. Which general direction are you heading if you are walking from point 2 to point 3?

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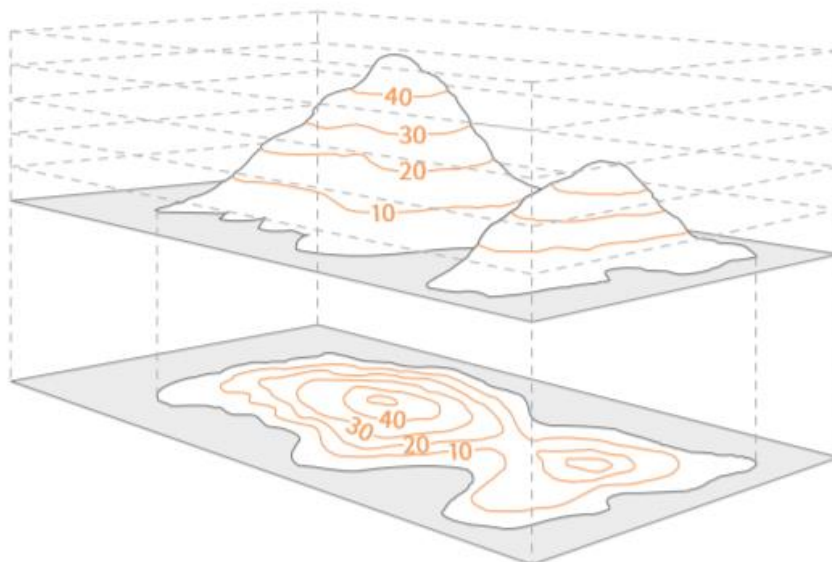
1c. Which general direction are you heading if you are walking from point 3 to point 1?

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## Contour lines on a Map

### How are hills and mountains shown on a map?

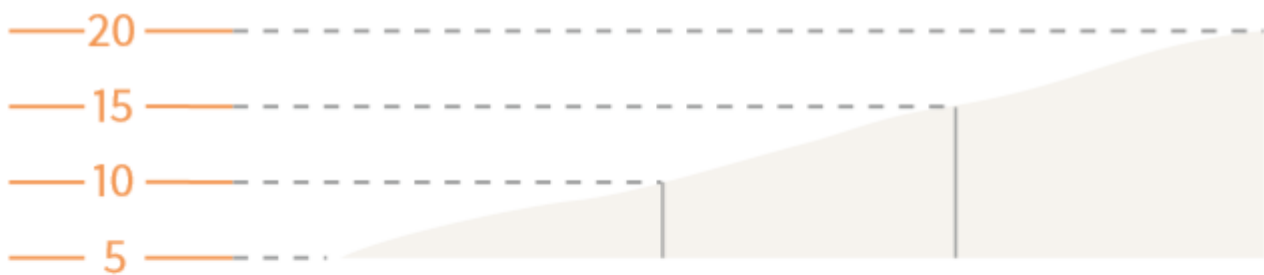
The ability to understand the shape of the ground from a map is a useful skill to learn, particularly in mountainous landscapes. The height and shape of the ground is shown on 1:25 000 scale maps by brown contour lines. A contour is a line drawn on a map that joins points of equal height above sea level. For 1:25 000 scale maps the vertical interval between contours is usually 5 metres, although in mountainous regions it may well be 10 metres.



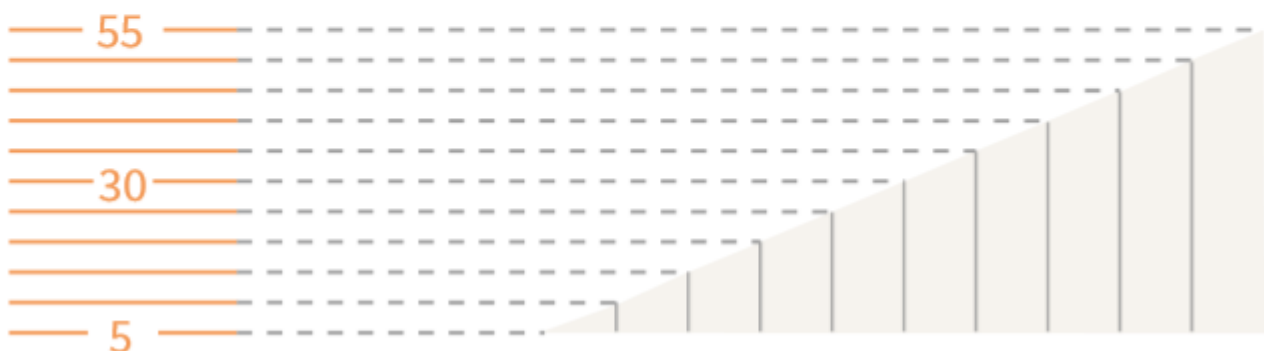
The above diagram shows the link between the shape of a hill and the contours representing it on a map. Another way of thinking about contour lines is as a tide mark left by the sea as the tide goes out, leaving a line every 5 metres.

## Top tip!

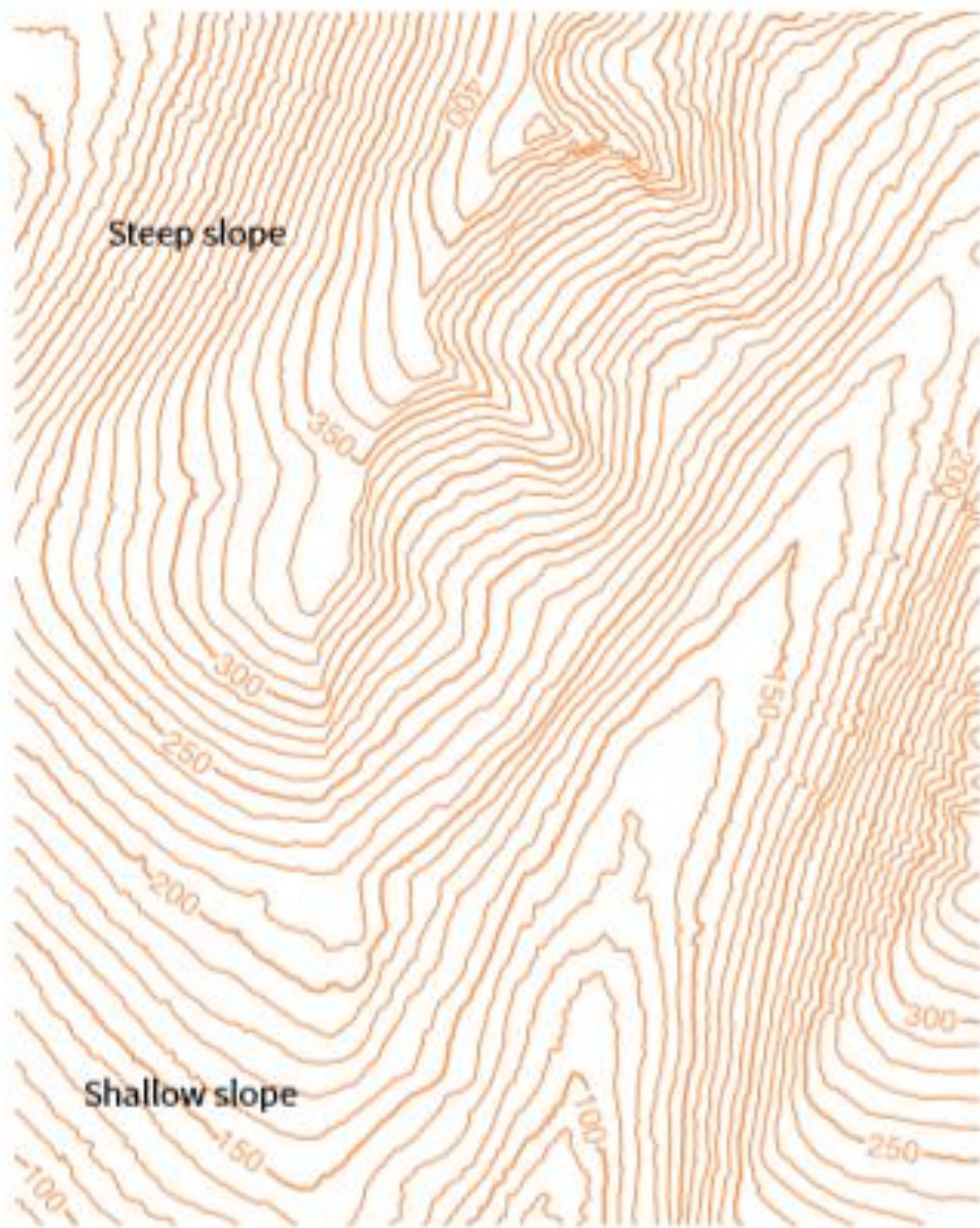
Remember contour numbering reads up hill – in other words the top of the number is uphill and the bottom is downhill. Also remember the closer contour lines are together, the steeper the slope. The examples below illustrate this:



Gentle slope



Steep slope



## Task 2

### Contour Patterns

2. Complete these sentences:

- Contour lines which are far apart show the land is .....
- Contour lines which are close together show that the land is .....
- A V-shape contour pattern which decreases in height shows a.....
- Circular contour lines which increase in height show a.....



hill

gently sloping

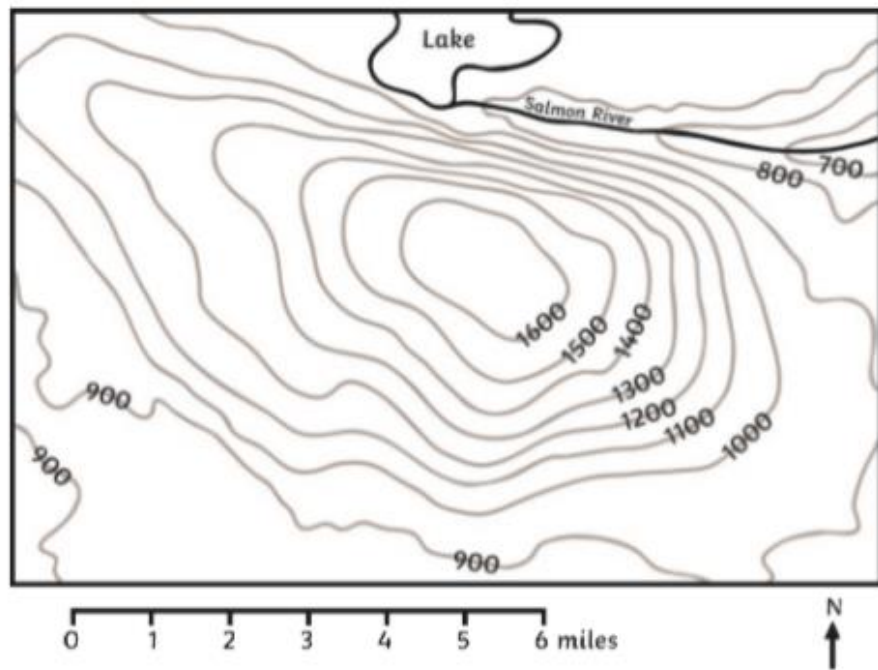
valley

steep



3. Label the map below to show these features:

- hill top
- river valley
- flat land
- very steep slope
- gentle slope



4. Match the contour patterns 1 - 5 to the landforms A - E.

1		A	
2		B	
3		C	
4		D	
5		E	

### Extension Activity

Draw the contour pattern for this landform:



### Final Activity!

Using the OS map of Dovedale, find and label the following:

- A very steep hill – does this hill have a name? How did you recognise it using contour lines?
- 

- Label a gentle slope. Can you name something on this slope?
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- Label an area of flat land

- CHALLENGE: Can you label a valley? Hint: the contours will be U shaped or V shaped!