



Mapwork key terms



Key term	Definition and explanation
Map	Maps are 2-D drawings of what we see in 3-D in real life. The Ordnance Survey is Great Britain's national mapping agency, providing the most up-to-date and accurate geographical maps of all corners of the country. Their maps have a scale, frame, grid lines and numbers, symbols and a key.
Scale	Scale is the ratio of the distance on a map in relation to the distance in real life. There are 2 scales used on most OS maps; 1:50,000 where 1cm on the map = 50,000cm or 500m on the ground, or 1:25,000 where 1cm on the map = 25,000cm or 250m on the ground.
Distance	<p>Any route or the distance between two points on a map can be measured using a piece of string (easier as it's flexible so can bend around the corners on the route!) or with edge of a piece of paper. With the latter, basically the start of the route is marked on the edge of the piece of paper and another mark made on the piece of paper every time a bend is encountered, until the end point. You end up with a series of marks on the edge of a piece of paper which follow the route – the start and end points of which are the important ones for finding the overall distance.</p> <p>To convert this length of string / the distance on the edge of the piece of paper into their 'real' distance on the ground, the scale on the map needs to be used. Place the string or piece of paper against this scale and read off the distance in km. Alternatively, a useful 'rule' to remember is that the blue grid lines on the map are 1km apart and can be used to measure the distance in km!</p>
Symbols	Maps use symbols to show different features on the map. It would be very cluttered if everything was labelled in words! Symbols fall into 3 basic categories; line / linear (e.g. roads, footpaths, contours), area (e.g. woodland or marshes), or spot / point features (e.g. buildings, bridges, masts, places of interest like museums, abbeys). There is a key to explain the meaning of each symbol.
Relief	The 'shape' of the landscape. On maps, this is represented using the brown squiggly lines, or contour lines.
Contours	<p>Contour lines join places on the map which are the same height above sea level. They are a way of showing the shape of the land in 2-D rather than 3-D. Interpreting contour lines can be tricky, but here are some basic 'rules'...</p> <ul style="list-style-type: none"> • Contours are lines on a map joining points of equal height • Height is measured in meters above sea level • The distance between contour lines is called the contour interval, and is either 5m (in some upland areas of 1:25,000 maps) or 10m • They don't all have numbers on, so knowing the contour interval helps us to find out the numbers of the lines which don't! • Contour lines can tell us about gradients (how steep the land is) – the closer the lines are together, the steeper the land • Contours can help us to recognize simple landform features like hills and mountains and their shapes, valleys, plateau's and spurs.

Direction	Remember that the vertical (up-down) grid lines always run due north-south. Once you know which direction north is, it's fairly easy to work out the other cardinal directions of the compass. North, South, East and West are the main ones. Then there is NE, SE, SW and NW. It gets even more detailed if you describe the points between these, e.g. NNE, ENE, ESE, SSE, SSW, WSW, WNW, and NNW.
Grid lines	The blue lines on the map are called grid lines; they run north-south (vertical or 'eastings') and east-west (horizontal or 'northings'). Each grid line has a number on it. They are not there in reality, but are a useful tool on the map to help us to find places and pinpoint exact locations.
Grid references	<p>Grid references give the location of a place on a map. There are 2 types: 4-figure grid references and 6-figure grid references. The latter is more specific – it gives the exact location of a place, whereas 4-figure grid references only give the grid square where the place is located. This is an area of 1km² so it's not very precise!</p> <p>Like contours, learning how to 'do' grid references can be complicated, but some useful 'rules' to remember are:</p> <ul style="list-style-type: none"> • You always read the number along the bottom first (the vertical lines or 'eastings') – 'walk before you climb' or 'along the corridor, up the stairs' are useful ways of remembering! • 4-figure grid references give the numbers of the lines which 'meet' at the bottom left corner of the grid square • 6-figure grid references have 6 numbers – 4 are the numbers you already know (the 4-figure reference of the bottom left corner of the grid square)...the 'missing' numbers you must 'find out' are the 3rd and 6th in the sequence • To do this, you must imagine that each square is further sub-divided into 10 smaller sections, between the main grid lines. You get the 'missing' 3rd number by counting along these smaller sections between the main 'eastings' lines. You do the same 'up the stairs' between the main 'northings' lines to get the 'missing' 6th number • Practice is by far the best way of learning and remembering!