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| **Bushwalking.jpg** | **Bushwalking - Maps and Hiking** |

**What Do I Carry?**



Both you and your group’s safety can be jeopardised by inappropriate clothing, footwear and equipment.

In an emergency, it may take hours to evacuate a sick or injured person.

Warmth, weather protection, water (or access to it) and first aid is vital.

You will need to carry your own back pack on outings and hikes. Carry only what is necessary. In general always take the following:

* Solid walking shoes – *Dunlop Volleys are great*
* ¾ length waterproof rain jacket with hood.  
  *Shower proof spray jackets and quilted parks are not waterproof and create a real danger of hypothermia (lowering of core body temperature to dangerous levels).*
* Warm jumper of wool or polyester fleece.  
  *Cotton shirts (while great in summer) and windcheaters have minimal insulation when wet and retain water. Wool and polyester provide greater protection from heat loss in cool conditions.*
* Shorts or loose, comfortable wool/synthetic pants  
  *Jeans are not suitable as they are cold and heavy when wet.*
* Wide brimmed sunhat and sunscreen.  
  *Think about your ears, face and neck.*
* Sunglasses with strap.  
  Be sun smart!
* Map and compass.  
  Carried by someone who knows how to use them.
* Water, minimum 2 litres for a full day hike.
* Food.  
  *For short walks; nutritious snacks and a piece of fruit.*
* Personal First Aid Kit  
  *Bring your own basic first aid kit. Your Leader may be carrying a larger kit for your group.*
* A whistle on a neck cord.  
  *3 blasts for the lost, 1 for the rescuer.*
* Small torch.  
  *Take spare batteries always!*
* A comfortable day pack.  
  *A bag with straps to wear over the shoulders is essential.*
* Shelter from the elements (Leader to carry)  
  *Your group may need to get out of the weather. Carrying a tarp, hootchie or emergency blanket.*

Pack your raincoat and first aid kit near the top for easy access.

**Map Reading Made Easy**

***What is a map?***

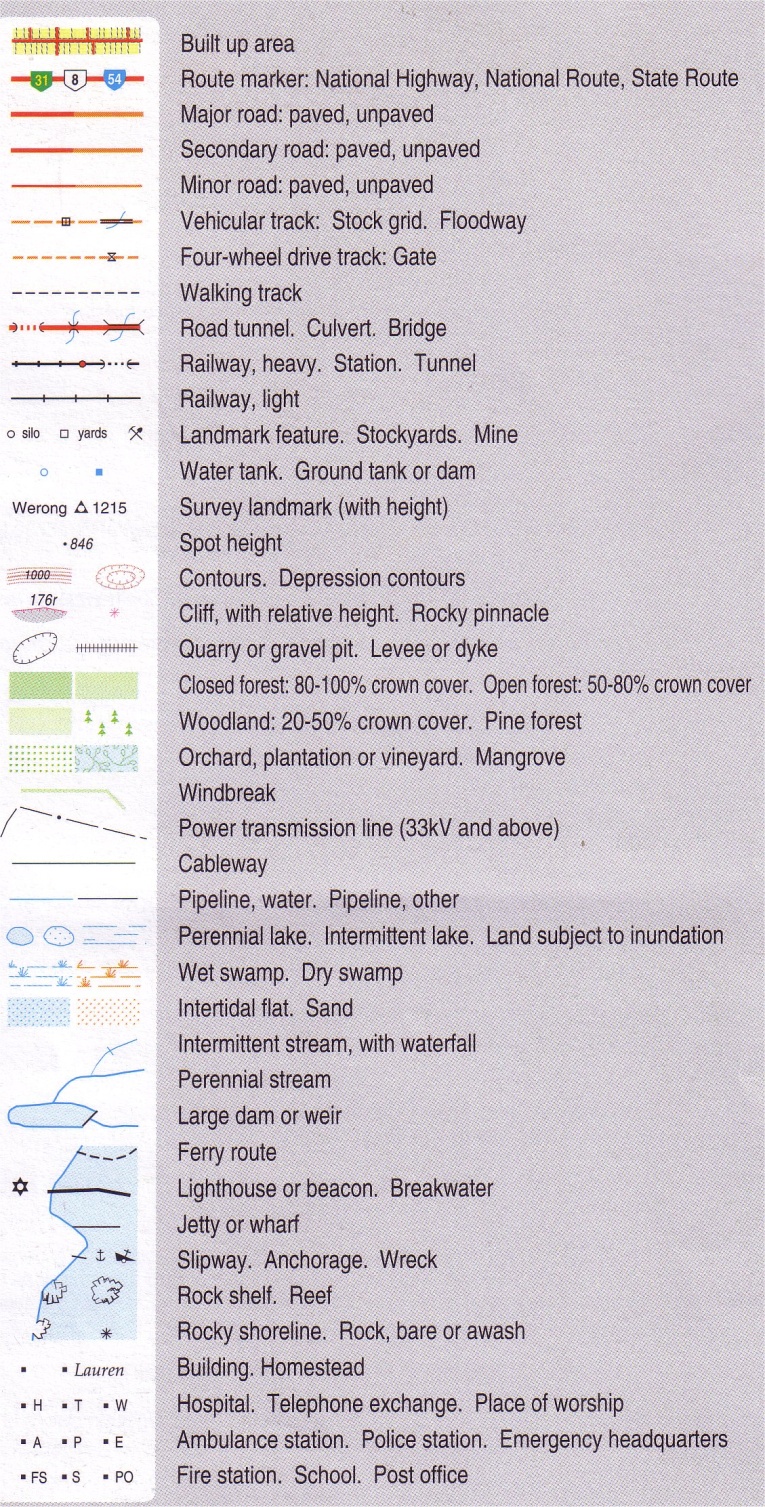
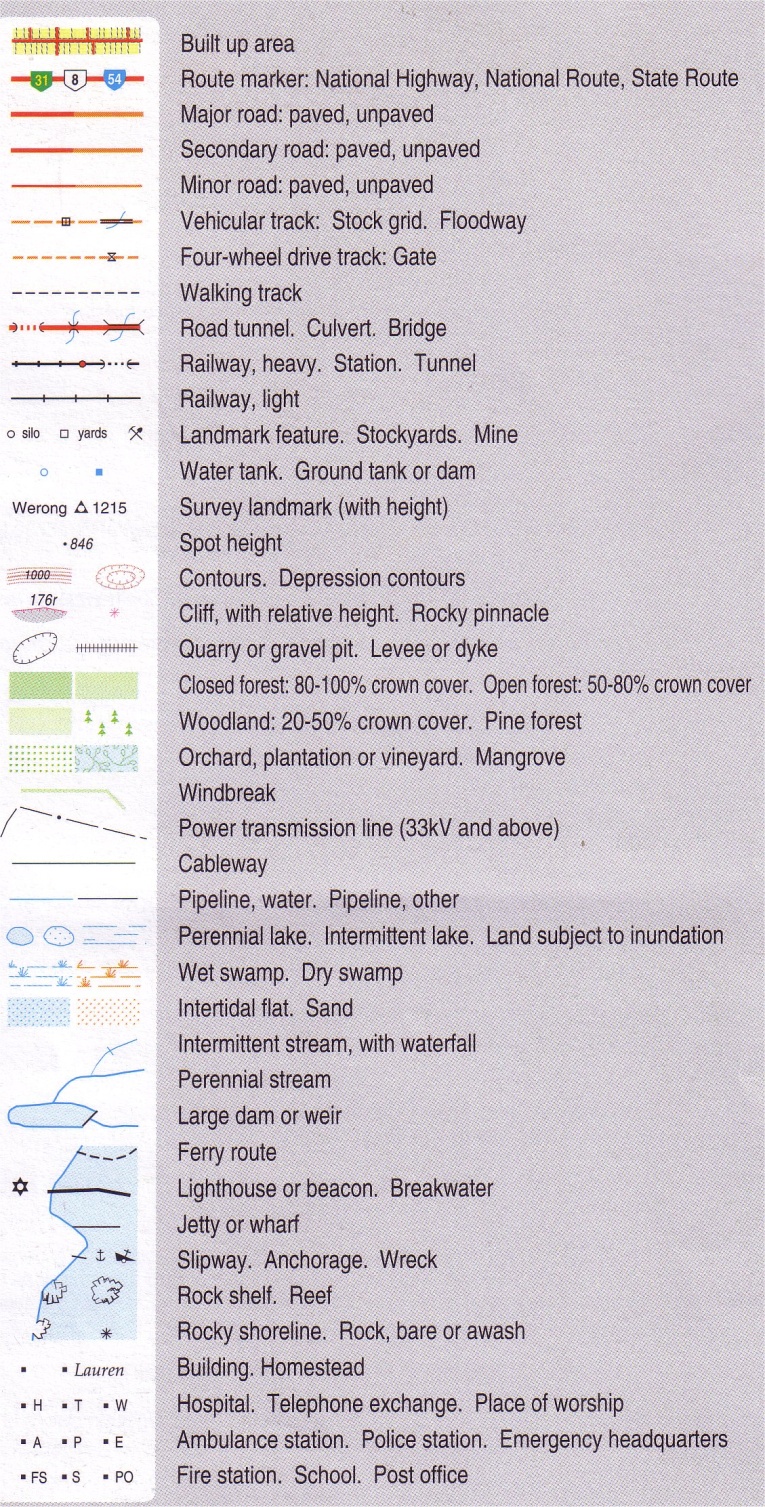
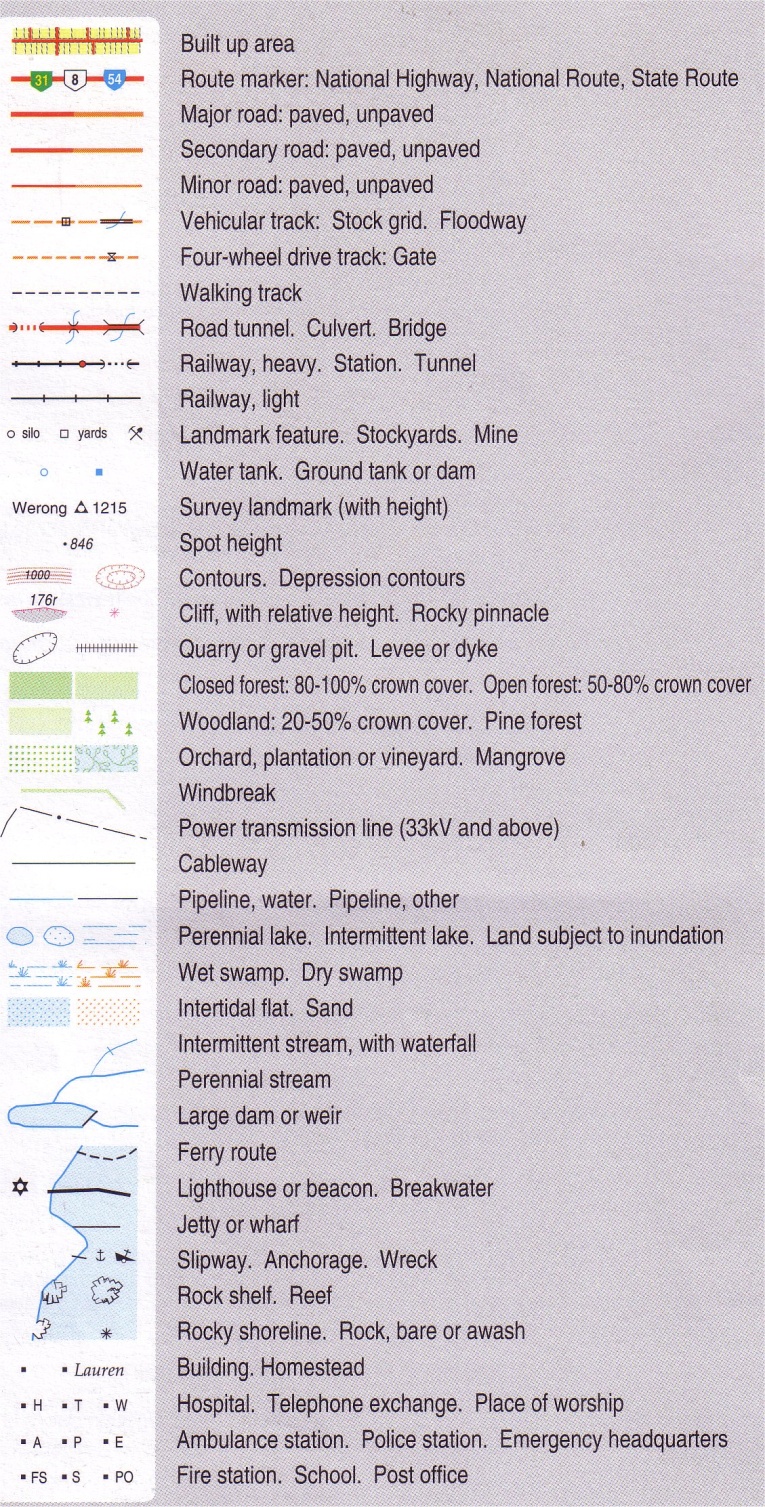
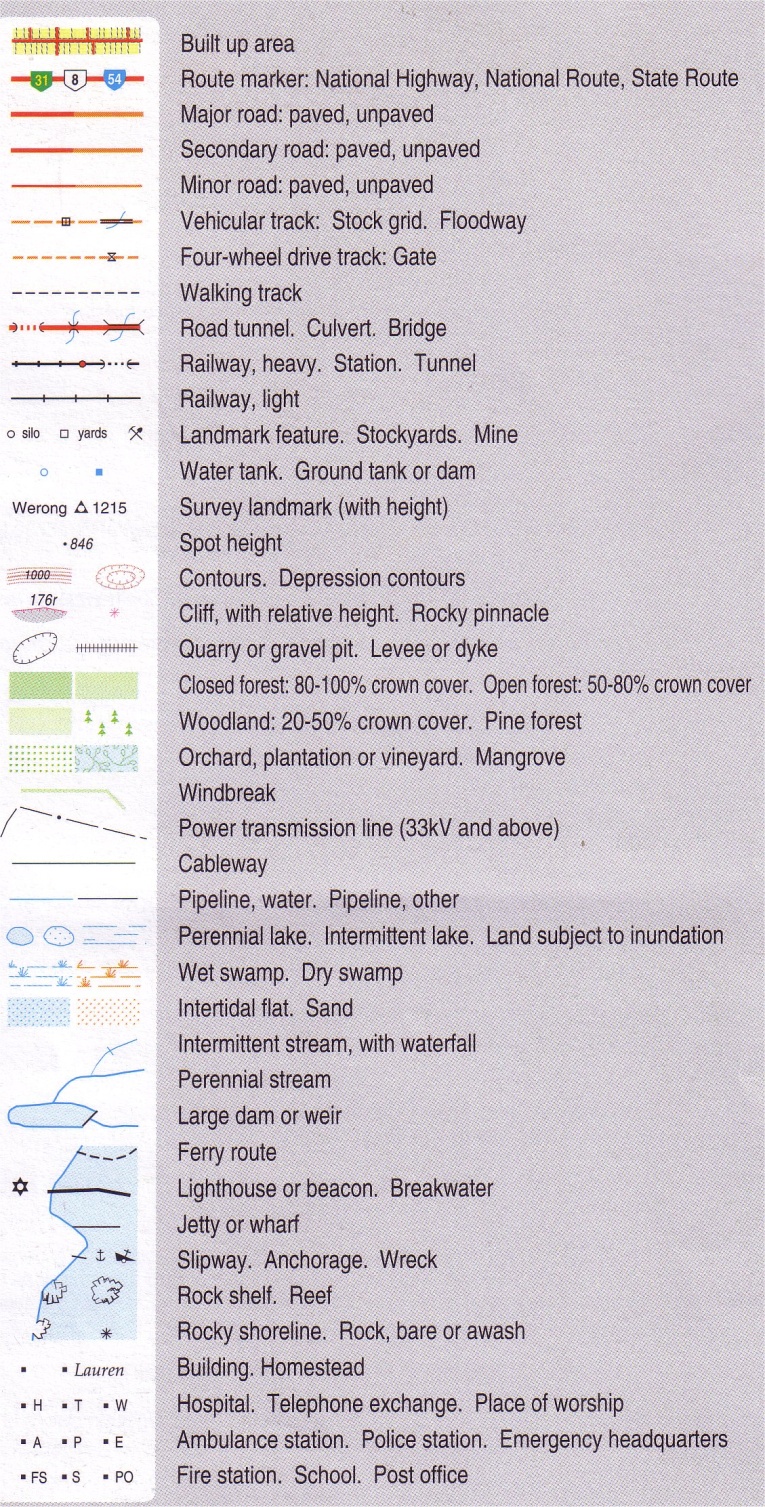
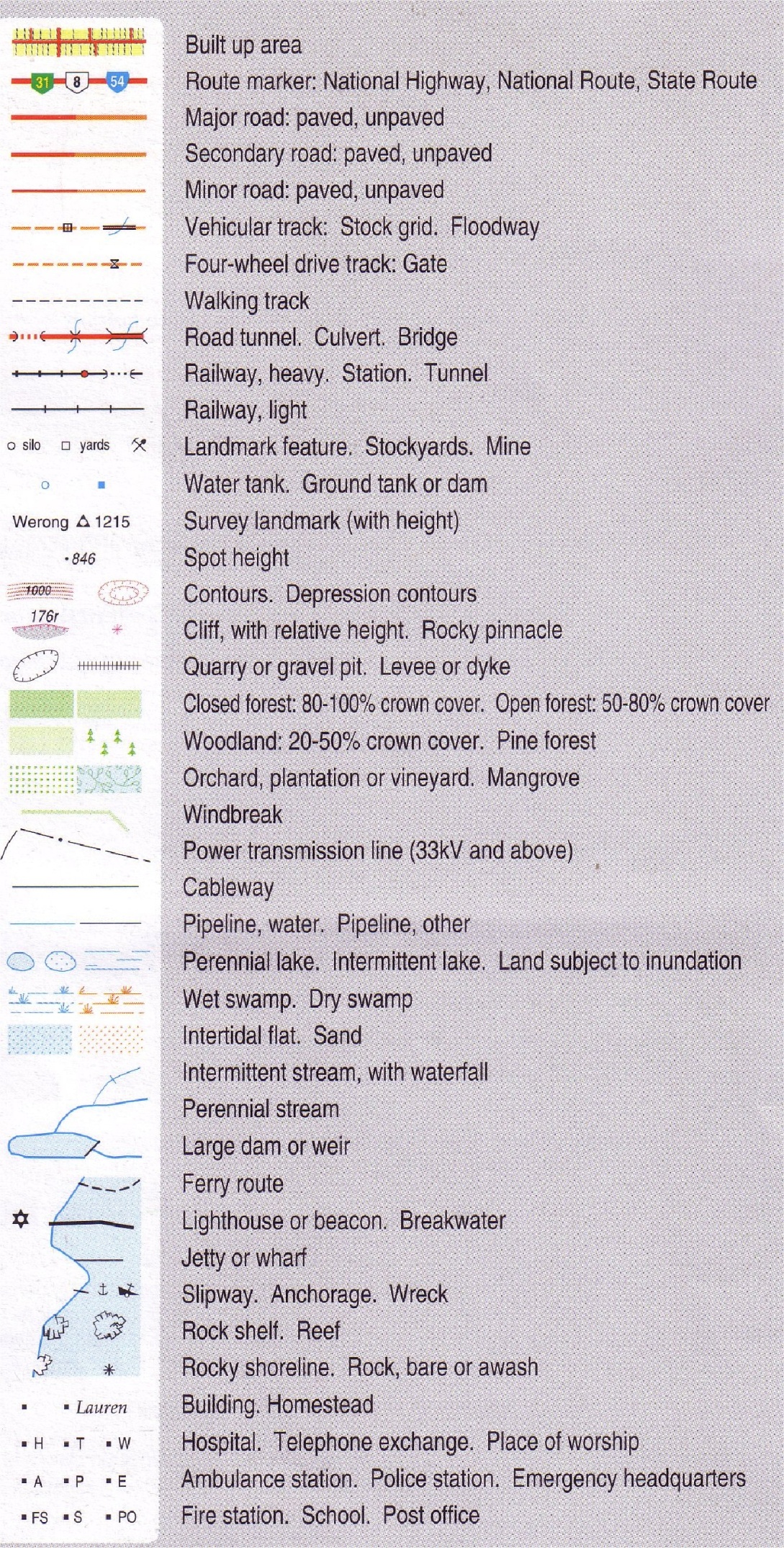
A map is simply a drawing or picture (in 2D) of a landscape or area of a country (in 3D). It could be anything from a sketch map for a visitor to find your school to a detailed map of a town centre or mountain range.

Using a map you can visualise in your mind what the place looks like that you are going to, and you can see what landmarks and features you will pass on the way to your destination. Maps mean you know what to expect, and they help you to know you are going in the right direction to arrive at your destination safely and quickly.

***What are all the different symbols?***

When drawing a map, you will find that you have to label lots of things you draw, such as a shop or a church, so other people can tell what they are. If words were used to label these places on maps there would be too much writing and it would get very confusing. The way we get around this problem is by using different shapes, colours and symbols to show the roads, buildings and rivers and other interesting things in our landscape. Maps may even show you things you never knew were there!

Maps usually have a key that explains the symbols and their meanings. If you find a symbol on the map that you don’t know, simply look it up in the key.

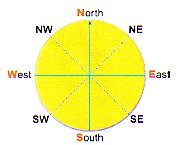
**Which direction am I going?**

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:

Never Eat Soggy Weetbix

Naughty Elephants Squirt Water

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

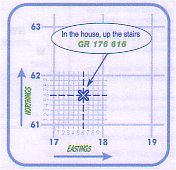
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**Grid References**

A grid reference (GR) is a set of numbers (usually 6) that will indicate a point on the map. A six figure GR looks like this 574 678. THE FIRST 3 NUMBERS indicate how far EAST the point is on the map, and THE SECOND 3 NUMBERS indicate how far NORTH the point is on the map. GRs are always relative to the map you are using, so always quote the map you got it from.

The straight lines drawn on topographical maps are called Grid Lines. These lines are numbered along the bottom and up the side of the map and are called grid numbers. They range from 00 to 99. The grid numbers along the bottom are called eastings, because the numbers increase as you go east, and up the sides; northings. This is for the same reason. For all references, always read the eastings first. Grid references are easy if you can remember that you always have to go along the corridor before you go up the stairs.

To find a 6 figure grid reference divide the space between the grid lines into lots of 10 and then number from 1 to 0. A six figure grid reference will be split into 2 groups of 3.



**What is scale?**

Maps cannot be drawn life size; otherwise you would have to carry a piece of paper many kilometres long. Maps are therefore drawn to SCALE. They might use a scale where 1 centimetre shows one kilometre. At the edge of the map they will show you the scale they have chosen like this:

1 cm = 1 km or 1:100,000

The second way is more normal and means that 1 cm on the map is equivalent to 100,000 cms on the ground (or 1 km).

**How do we measure distance?**

It is always important to know how far you have to travel and how long it is going to take you. By measuring a distance on your map, you can work out how far that is in reality. You can measure this distance either in a straight line (as the crow flies) or following a winding route such as a country lane. To get this information from a map is very easy.

Here is a way of doing it:

You can measure between two points by using a thin piece of string. If you are measuring the distance in a straight line, then simply stretch the string between the two points. If you are following a road or track that is not straight, bend the string to follow the exact shape until you reach the second point.

Now that you have a distance in centimetres marked on your string you can find out the real distance. You can do this in a couple of ways:

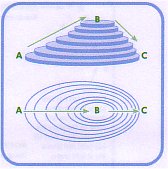
By eye –place the string against the scale bar on the map

By measuring – measure your distance on your string with a ruler.

Suppose your string is 10 cms long. You know that 4 cm = 1 km, so the answer is 2.5 km.

**How are hills and mountains show 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 maps by brown contour lines. A contour is a line drawn on a map that joins points of equal height above sea level. The closer the lines are together, the steeper the terrain is.



Maps are a very important source of information. Walkers, explorer, scientists, emergency services, aviators as well as motorists use them. Maps often encourage people to do what they want to do, allowing them to get more enjoyment out of life. You should never go on a hike without a compass and a recent map.

**References:**

Book of Cub Scout Challenges

Cub Scout Leaders’ Resources Folder

<http://magazine.ordnancesurvey.co.uk/magazine/tscontent/editorial/mapfacts/leaflets/os_leaflets.html>

<http://www.bushwalkingleadership.org.au/Home/index.htm>