Map Information Part 1

37. **Time.** 1 x 40 minute period:

    a. 15 minutes revision/practice

    b. 25 minutes instruction

38. **References.** ACP32/1 Chapter 2

39. **Stores.**

a.	Identical 1:25,000 maps or extracts	*1 per student and instructor*
b.	Flash cards showing map symbols	*As available*
c.	Romers	1 per student and instructor
d.	Paper to practice map folding	*1 per student*

40. **Preparation.** Check stores

41. **Revision.** The first fifteen minutes of this lesson is to be a full revision and practice session, covering:

    a. Map care and folding

    b. Scales – conversion of distances to and from the map at common scales

    c. Map selection

    d. Grid references – estimation and use of romers

42. **Objectives.**

    a. Practice the skills learnt so far

    b. Identify the main symbols on Ordnance Survey maps

c. Explain the importance of the use of symbols on Ordnance Survey maps

43. **Introduction.** When a map maker compiles information to put on to a map the aim is to give an accurate representation of what is on the ground. An aerial photograph of an area the same size as your map would not give you all the information you require and would not be very clear. A map improves on an aerial photograph by using a set of convenient signs and symbols (a kind of shorthand depicting features on the ground). After a little practice using these signs and symbols you will soon find it quite easy to read a map and interpret what you see. Maps have an area called the legend, where symbols are defined – if you see a symbol that you don't understand, look it up!

44. **General Features.** *Explain.* You must be able to “SEE” what is on a map and know what the features would actually look like if you were standing in front of them. To help you in this, some of these features are graded to signify the degree of importance they hold. Sometimes the same symbol is shown in different colours to signify a difference; for example, red National Trust symbols show the area is open all year, whilst the same symbol in blue indicates it has a restricted opening period. It is worth noting the following:

a. If a feature is fenced-in then it will have a solid line on the map but if it is a natural boundary it will have a broken line around it.

b. Although most symbols are the same or very similar, there are some differences between the symbols used on 1:25,000 and 1:50,000 scale OS maps.

Point Features

45. ***Triangulation Points.*** *Explain and demonstrate.* Surveyors build up a map from a large number of triangles. The angles that are calculated from field work go into giving an accurate measurement on the ground. The points from where this information is taken are called triangulation points (trig points). Trig points are actually concrete pillars around 1.5 metres tall. On the map they are shown

as a small blue triangle with a dot in the middle with its height printed next to it (to the nearest metre). Because they are recognisable and usually – although not always – placed in prominent positions, they can be very valuable navigational aids, particularly when hill-walking.

46. ***Spot height.*** *Explain.* Spot heights appear on maps as an added guide and are used to back up triangulation points. They are represented by a dot with the height next to it (to the nearest metre) – it should be noted that there is no actual feature on the ground.

47. ***Buildings.*** Certain buildings are marked clearly on maps, either for convenience or because they are useful for navigation:

a. *Church.* Places of worship are marked by a cross, with the exact symbol as follows:

(1)	*With tower.*	Square with a cross extending
(2)	*With spire/minaret/dome.*	Circle with a cross extending
(3)	*With no significant features.*	Cross on its own

b. *Post office.* The letters PO

c. *Public house.* The letters PH (1:50k) or a blue pint-glass (1:25k)

d. *Youth hostel/bunk-house.* A pink triangle/square

e. *Other structures.* Lighthouses, transmission towers, windmills and wind-farms all have small pictorial representations.

Linear Features

48. ***Roads and paths.*** *Explain and demonstrate.* There are some signs and symbols that will be more important to you when you are planning an expedition on foot - they will be roads, paths

and tracks. Note the different colours representing different types of road.

49. ***Railways and waterways.*** *Explain and demonstrate.* Railway conventional signs are used to indicate either double or single track. Special features include tunnels, cuttings, sidings and embankments. Stations that are open to the public are shown in red, whereas a station that is closed is shown in white. Bridges, viaducts and tunnels especially those connected with roads, railways and waterways are shown as solid objects when above ground and as dotted or broken lines when below ground.

50. ***Contour lines.*** *Explain.* Contour lines are used to show relief (hills and valleys) on a map – they will be covered in a later lesson.

51. **End of lesson drill.**

a. Summary of key points.

(1) Map symbols allow the map to display a greater level of detail that in aerial photo would give.

(2) There are a wide variety of symbols on an OS map, if you're unsure look the symbol up in the legend.

(3) There are some differences between 1:25,000 and 1:50,000 scale map symbols.

b. Questions to and from the class

c. Look forward to the next lesson

Triangulation point