



## Getting your Bearings

*Taking a bearing*

### **Narrator**

Once again, the map provides information about the presence of a footpath but not its present condition. Perhaps the only thing about the path that you could have confidently predicted from the map was its steepness.

Let's look at how the compass they've been using works with the map. There's a grid of lines running north/south and east/west. Bearing measurements are made in relation to Grid North. This is the walkers' compass. It's got a red magnetic needle in the circle, which is of use outside; but when you're reading bearings on a map, you ignore this needle and use the compass as a protractor. Suppose that you are at one point on the map, say here, and another point of interest is here. The direction in which you would look at the second point is known as its *bearing* from you, and it's given as the angle measured clockwise from Grid North. You can either lay an edge of the compass along the line of the bearing or, better still, lay the centre line of the compass along the bearing. Then adjust the yellow arrow and black 'northing lines' to line up with the Grid. In that way, nought degrees on the protractor coincides with Grid North. This bearing then reads 40 degrees. Remember that Magnetic North is not the same as Grid North. When this video was made, Magnetic North was about five degrees west of Grid North for your map. In the field, you have to zero the protractor using the red magnetic needle, which points to Magnetic North. Therefore a bearing taken outside, anywhere in the UK in fact, will give you an angle that's greater than the reading from Grid North. So, when you compare bearings taken outside with bearings on the map you must adjust your figures to take account for this magnetic variation.

Let's get back to the walk.

### **Mike**

Well, at least this path contains people now, doesn't it? It doesn't have them just meandering all over the place.

### **Chris**

Well, this is Mam Tor, right?

### **Mike**

Yes, Chris, you're right – because we can tell from the map. We've got a triangulation point here, which is a definite feature on the map. Hey, Liz, you wanted to have a go at this, didn't you?

### **Elisabeth**

I did

### **Mike**

Here you are.

**Elisabeth**

Thank you.

**Mike**

There you go.

**Elisabeth**

Right. What shall I do? Shall I find out what that village over there is?

**Mike**

Yeah, you have a go at that.

**Elisabeth**

I think – right. Line it up like that in that direction. Turn the arrows round so that they line up, like that. That's about 36. Take five off. Line the compass up with where we are at Mam Tor. Line the arrow up with the gridlines, and that village must be Nether Booth.

**Mike**

Well done. Right, shall we carry on?

**Chris**

OK, let's go.

**Mike**

We're getting quite near Hollins Cross now. You can see that over there.

**Elisabeth**

Is that it over there, then?

**Narrator**

Now the walk is easy going all the way to Hollins Cross.

Between Mam Tor and Hollins Cross you leave National Trust property, and the condition of the path gets somewhat more rugged.