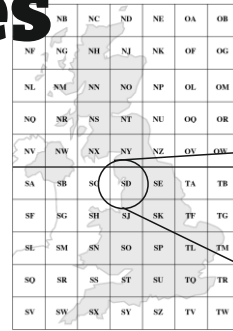


Grid References

Explanation



1. The country is split up into big (100km) squares, and each square has a two letter label like SD.



700km

3) We split each of these squares into smaller ones, 10 in each direction, so each one has a number. We count along, and then up, and the number is the bottom left corner of the square. This square's number is 83 12.

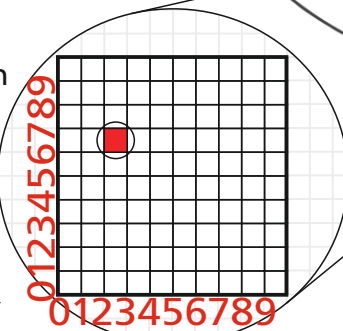
"Go along the hall then up the stairs."



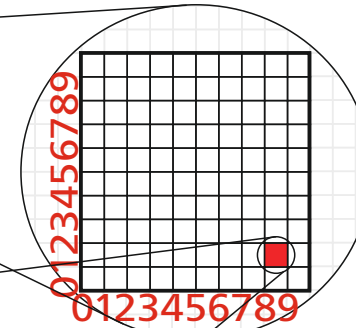
10km

5) We split each of these squares into smaller ones, 10 in each direction, so each one has a number. We count along, and then up, and the number is the bottom left corner of the square. This square's number is 8362 1246.

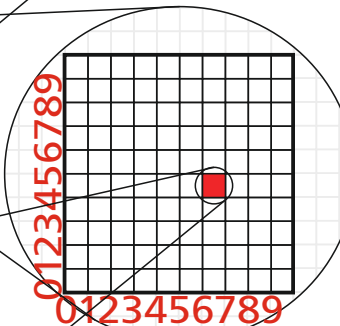
"Go along the hall then up the stairs."



100m



100km



1km

2) We split each of these squares into smaller ones, 10 in each direction, so each one has a number. We count along, and then up, and the number is the bottom left corner of the square. This square's number is 8 1.

"Go along the hall then up the stairs."

4) We split each of these squares into smaller ones, 10 in each direction, so each one has a number. We count along, and then up, and the number is the bottom left corner of the square. This square's number is 836 124.

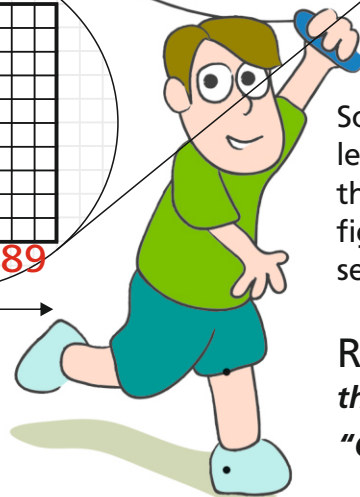
"Go along the hall then up the stairs."

So our full 8 figure grid reference is SD 8362 1246. This is the bottom left corner of a square 10 metres on each side. That's about the size of the playground next to the scout hut. So if you give someone an 8 figure grid reference of where you are, they can get close enough to see you and talk to you.

Remember-

the number is of the bottom left hand corner of the square.

"Go along the hall then up the stairs."



Grid References

Using grid references on a map

OS maps usually have a grid showing squares that are 1km each way. Each grid line has a two digit number somewhere along it. This means each square has a 4 digit grid reference. They're the squares in step 3 of the explanation.

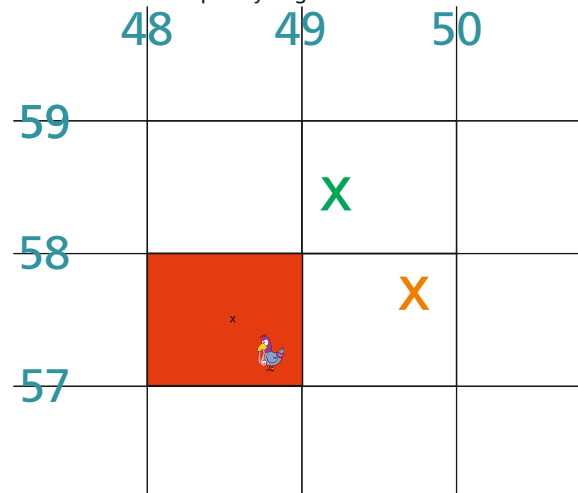
The red square here has the 4 digit grid reference 4857.

But if you want to tell someone where you are- either to meet them or if someone's injured for example- there's a lot of space in this square and it'd take a long time to find each other. So we have to divide it up ourselves.

By looking at the green X, we can say the middle is about half way up the square and about a quarter of the way across. So its 6 figure grid reference is about 492585. But to be more accurate we'd have to measure it. And it's not even worth trying to give an 8 figure grid reference without measuring it.

That doesn't mean we can't **use** an 8 figure grid reference though unless we can measure it. If I say the orange X is at 49755769, you can say it's in the square at grid **49755769**. And you could say it's more than half way along and more than half way up. So without any measuring you've figured out roughly where it is, which is better than just saying you can't do it.

These numbers are going "along the hall" even though the lines they're on are going up- easy to get confused!



Measuring grid references

The compasses we use look a bit like the one in the picture. They are called Orienteering Compasses. This means they've got extra things that are useful for finding your way about with a map. Some of these extra things are scales on the side that look like what you see on a ruler.

Because different maps are printed at different scales, you need to know the scale of the map you're going to use. The maps we're using are 1:10000 scale. This means each 1km square measures 10cm across on the paper. And this means we can use a normal ruler, or the millimetre scale on the compass, to divide each square up into 100 smaller bits in each direction.



This box is just like the grid squares on a 1:10000 scale graph- it's 10cm on each side, and you can see the two printed grid references- it's the square coloured red on the picture of the grid. If you measure the distances from the edge, you can see that the X is at 4852 5748 and the tip of the bird's beak is at 5725 4852.

