

What are grid references?

Maps can be quite complicated and it may be difficult to find things on them. To make places easier to find, a grid of squares may be drawn on the map. If the lines making up the grid are numbered, the exact position of a square can be given.

On Ordnance Survey maps these lines are shown in blue and each has its own special number. The blue lines form **grid squares**. **Grid references** are the numbers which give the position of a grid square. On these two pages you will learn about **four figure grid references**.

To *give* a grid reference is simple. Look at the grid in diagram **A** and follow these instructions to give the reference for the yellow square.

- ◆ Give the number of the line on the *left* of the yellow square – it is **04**.
- ◆ Give the number of the line at the *bottom* of the yellow square – it is **12**.
- ◆ Put the numbers together and you have a four figure grid reference. It is **0412**.

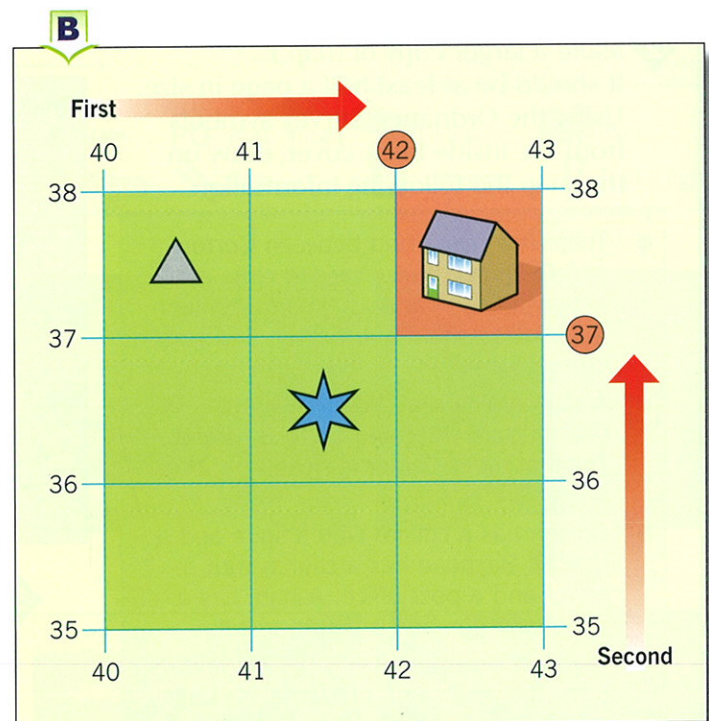
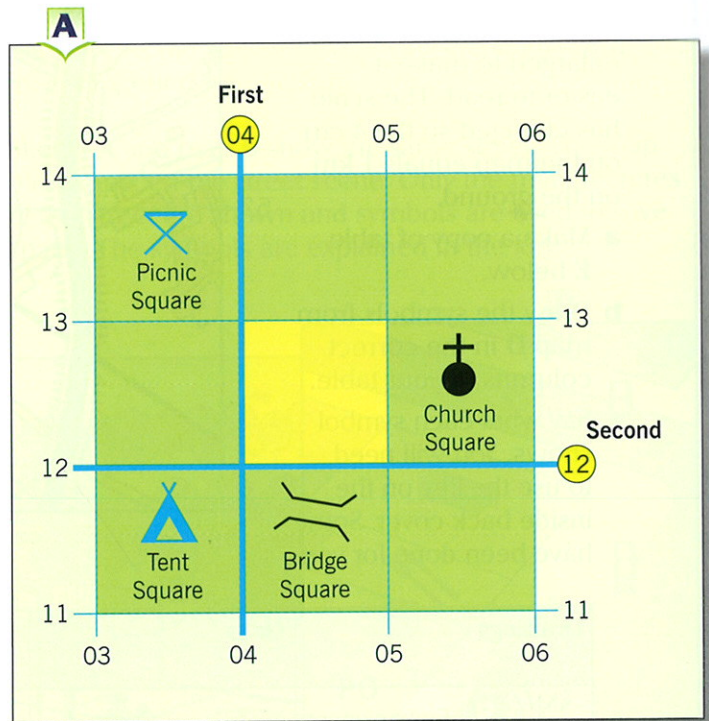
In the same way, the Picnic Square has a reference of 0313 and the Church Square is 0512.

What will be the grid reference for the Bridge Square the Tent Square?

To *find* a grid reference is also easy. Look at the grid in diagram **B** and follow these instructions to find grid square **4327**.

- ◆ Go along the top of the grid until you come to **42**. That line will be on the *left* of your grid square.
- ◆ Go up the side of the grid until you come to **37**. That line will be at the *bottom* of your square.
- ◆ Now follow those two lines until they meet. Your square will be above and to the right of that point. There is a house in it.

What is in squares 4136 and 4037?



Activities

Look at map C of the British Isles. It shows some of the main towns, mountain areas and the three longest rivers. Use the map to answer the questions below.



Remember

- ✓ The line on the left comes first.
- ✓ The line at the bottom comes second.

It may help you to remember if you say 'Along the corridor and up the stairs'.

- 1 Name the towns in each of the grid squares given below. Choose your answers from this list:

Belfast Manchester

Glasgow Bristol

- a 0202 b 0104
c 0200 d 0003.

- 2 Name the mountain areas in each of the following grid squares:

a 0104 b 0103 c 0202.

- 3 a Which rivers flow through grid square 0201?
b Which river reaches the sea in grid square 0201?

- 4 Give the grid references for these places:

- a Dublin
b Newcastle upon Tyne
c London
d The Irish Sea.

- 5 Give the grid reference for the place where you live.

- 6 Look at the Ordnance Survey map on the inside back cover. Name the farms in each of the following grid squares (the symbol for farm is Fm).

a 4149 b 4156 c 4456
d 4650 e 4257.



Summary

Grid references can be used to help describe the location of a place on a map.

How do we use six figure grid references?

Grid references are very useful in helping us to find places on maps. A four figure reference on an Ordnance Survey map equals an area on the ground of one square kilometre. This is quite a large area. To be more accurate we need to use a **six figure grid reference**. This pinpoints a place exactly to within 100 metres.

Look at the grid in diagram **A**. The six figure grid reference for the church is 045128. Follow these instructions and look at diagrams **B** and **C** to see how that reference is worked out.

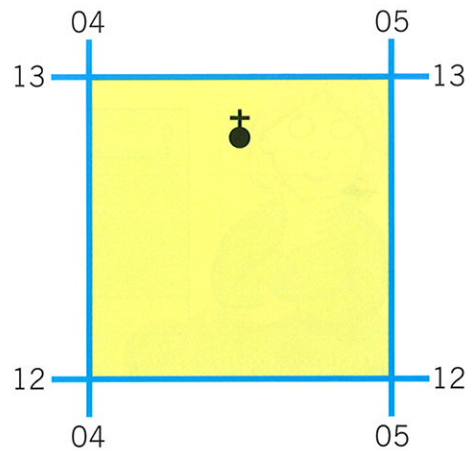
- ◆ Give the number of the line on the *left* of the yellow square – it is **04**.
- ◆ In your head divide the square into tenths as shown in the grid in diagram **B**. Follow arrow **A** across the square. The church is about halfway across from the left. That puts it on the five-tenths line. Write down **5** after your number 04.
- ◆ You now have the first half of your six figure reference – **045**.

Remember

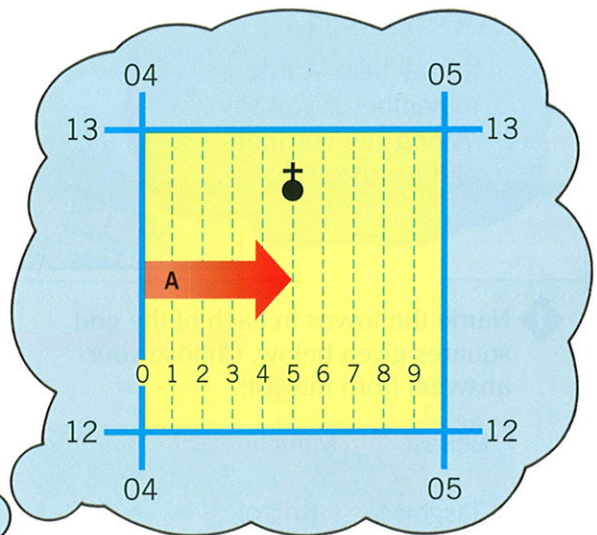
- ✓ The numbers along the **bottom** come first.
- ✓ The numbers on the **left** come second.
- ✓ There must always be six figures.



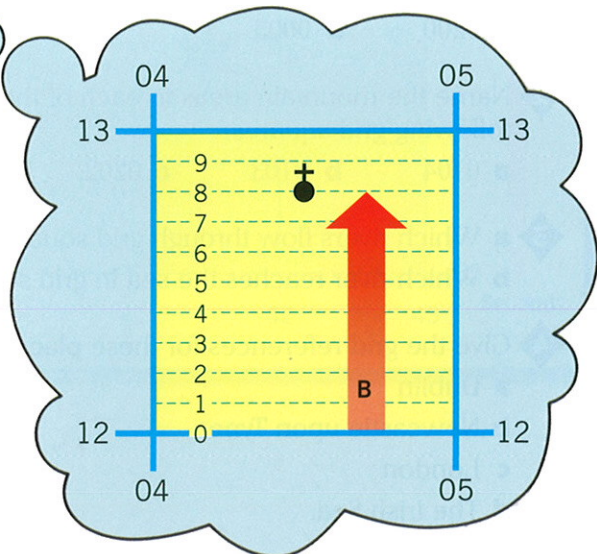
- ◆ Now give the number of the line at the *bottom* of the yellow square – it is **12**.
- ◆ In your head divide the square into tenths as shown in the grid in diagram **C**. Follow arrow **B**. The church is over halfway up from the bottom. That puts it on the eight-tenths line. Write down **8** after your number 12.
- ◆ You now have the second half of your six figure reference – it is **128**.
- ◆ Put the two halves together and you have **045128**.



A



B



C

Activities

Look at map D. The 'tenths' lines have been added to help you with activities 1, 2 and 3. Check your references ...

- The village of Eldon is in grid square 1623.
- The Mill is at reference 166256.
- Dingle Farm is at reference 170238.

1 Copy and complete the sentences below. Use the correct answer from the brackets.

- At 168245 there is a (church, post office, farm).
- At 165257 there is a (telephone, school, bridge).
- At 175233 there is a (farm, lake, level crossing).
- At 177244 there is a (station, wood, roundabout).

2 Give the six figure grid reference for each of the following:

- Eldon post office
- Causey railway station
- Padley school
- Burr Wood picnic site.

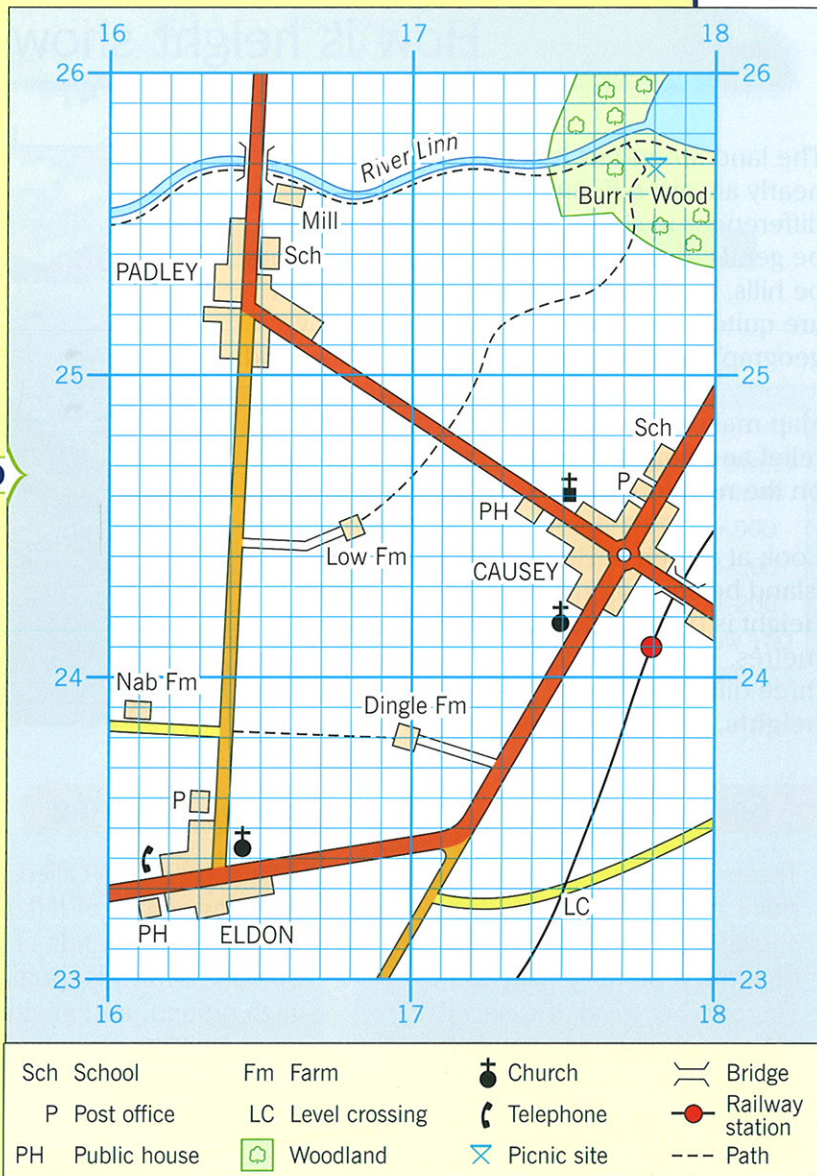
3 a Follow these directions for a pleasant walk:

Start at 170238. Walk down to 173237. Turn left and go to 177244. Go along the road to 171248. Follow the path to 178257. Turn left and finish your walk when the path reaches the road.

- Name the place where you finished your walk. Give its six figure grid reference.
- Where would you have stopped for lunch?
- How many churches did you pass on the way? Give their six figure grid references.

4 You will need to use the Ordnance Survey map of the Cambridge area for this question. It is on the inside back cover.

- Make a copy of table E.
- Use the map to complete table E. The missing symbols, meanings and references are given in diagram F.



Symbol	Meaning	Six figure grid reference
		465523
	Church with tower	488505
	Camp/ caravan site	

418509

Railway station

Wood

453539

Motorway junction

440534

Summary

Six figure grid references can be used to give the exact position of a place on a map.