

Castle Quest

Name: _____

Shape spotters

Edinburgh Castle is made up of lots of different shapes. Each shape was chosen carefully to make the castle stronger, easier to defend or just to look nice.

As you go round the castle find an example of the following shapes and write which square on the map it is in.

- 1 Cylinder
- 2 Rectangle
- 3 Arch
- 4 Triangle



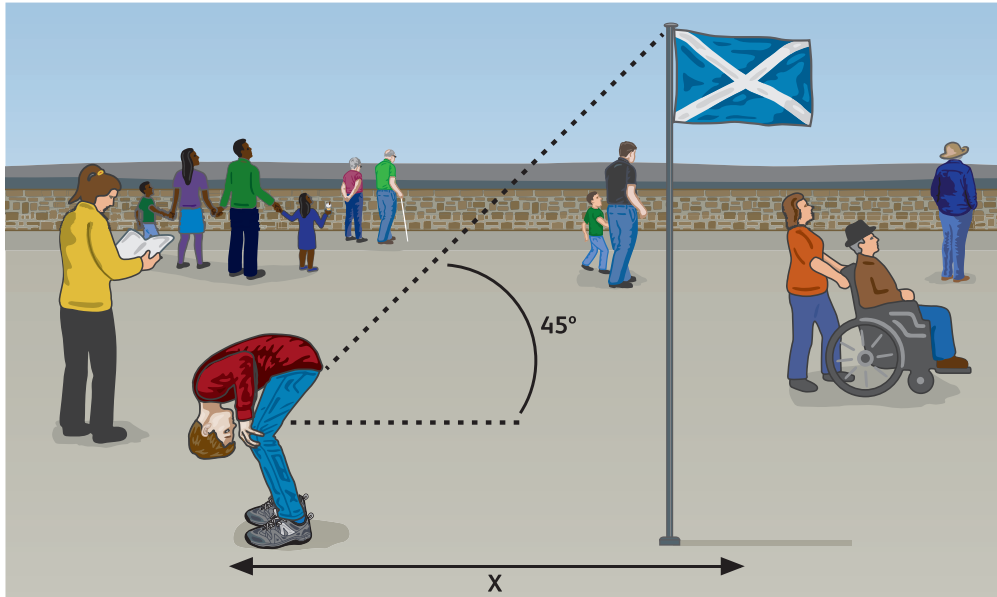
Discuss why you think each item is that shape.



The Half-Moon Battery is curved. Curves are better at deflecting missiles and create a clearer field of fire with no blind spots for enemies to hide in.

A different angle

Accurate measurements were essential when building castles. Builders used lots of different ways of measuring over the years, including string, sticks, compasses and even body parts!



How does this work?

This works because you are looking at the top of the landmark at a 45 degree angle. This makes a right angle triangle between the ground, landmark and your line of sight. Therefore the height of the landmark is the same as the distance that you are from that landmark.

- 1 Pick a landmark and stand at its base.
- 2 Walk away, stopping regularly to look between your legs.
- 3 Stop walking when you can see the top of the landmark between your legs.
- 4 Measure the distance between yourself and the landmark using paces or a measuring tape.

- 5 This distance is roughly equal to the height of the landmark.

Work out the height of a landmark in the castle, for example a flag or the War Memorial.

How tall is it?

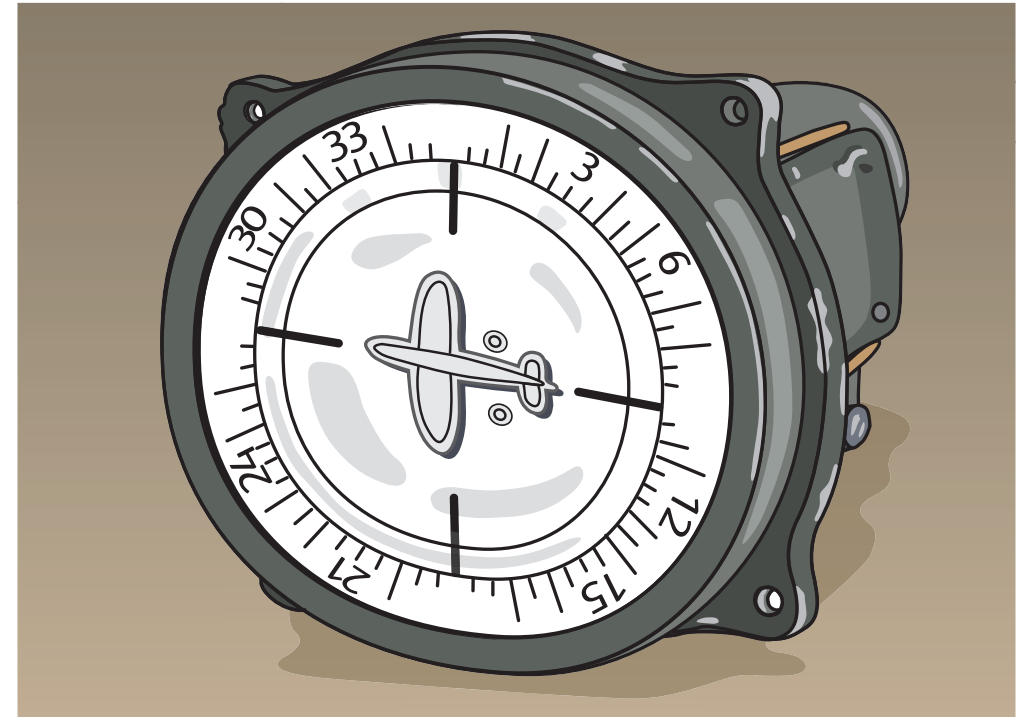


Find your way (National War Museum)

The pilots of planes such as the Heinkel III would have navigated their way using a compass and maps.

- 1 Go to Gallery 5 (In Defence) in the National War Museum and find the case about the Heinkel III.
- 2 Using the compass in the case as a guide fill in North, South, East and West on the drawing.

- 3 Head to the lookout point in Gallery 2. Find north using a compass, the sun or a map.



Pilots would have looked for large buildings, hills and rivers on the ground below to help their navigation.

What can you see when you look north?

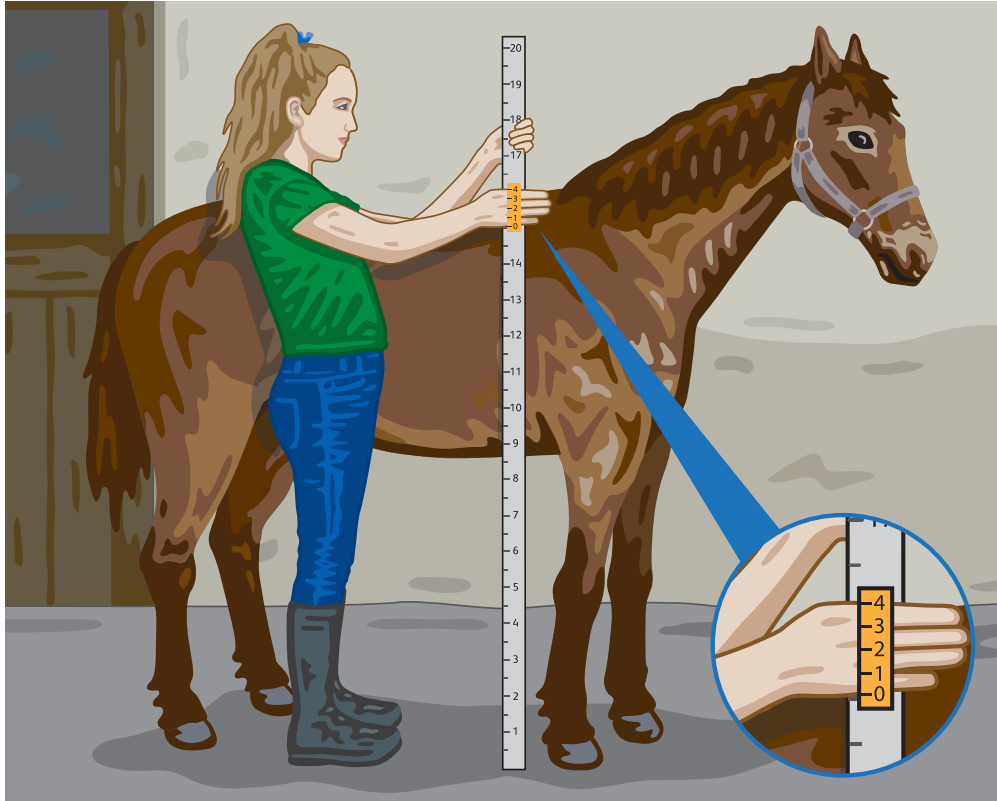
If you turn 90 degrees to the left what can you see now?

Castle map section grid



Measuring up (Royal Scots Dragoon Guards Museum)

Horses' heights are measured in Hands (hh). Since the time of ancient Egypt this unit of measurement has been used and was roughly the width of a man's hand. This eventually got a bit confusing, so in 1541 King Henry VIII standardised the measurement so that 1 hh = 4 inches.



Find the measuring tape in Gallery One in the Royal Scots Dragoon Guards Museum. Use it to measure your height in inches. Round your measurement to the nearest inch.

Write your measurement here in inches.

Work out how tall you are in hands.

If 1 Hand (hh) is equal to 4 inches, you need to divide your measurement by 4:

Example: $54 \text{ Inches} \div 4 = 13.5$.

So, we would call this 14hh.

How many hands tall are you?



Something to eat (Museum of the Royal Regiment of Scotland)

During war and training exercises soldiers call their food supply field rations.

The 24 Hour Ration Pack can feed one person for one day, and includes high energy snacks, drinks and three main meals which are fully cooked and ready to eat.

Find the Rationing display in the Museum of the Royal Regiment of Scotland (you need to walk all the way through the Royal Scots Museum).

How many items are there in one box?

How many items contain something to drink?

Items _____

Castle attack

Edinburgh Castle was one of the most attacked places in the UK. When enemies attacked, people in the castle would not be able to leave. The well supplied all the water. If the water ran out, the castle would have to surrender.

Find the well next to the Half Moon Battery.

To find how much water the well holds we need to know how wide it is and how deep it is.

Find the depth of the well on the plaque.



How many items contain something to eat?

Items _____

How many items are not edible?

Items _____

What percentage of the box is:

1 To drink _____%

2 To eat _____%

3 Not edible _____%



Round your answer off.

During attacks the castle had 120 soldiers.

If each soldier needed 3 litres of water per day to drink, wash and cook with.

How much water would 120 soldiers need each day? _____

If the well holds 60,000 litres, how long could 120 soldiers survive during an attack? _____ days.

Mason's mark

Masons carved the stones used to build Edinburgh Castle. They would carve a mark into each stone like a signature.

Head down the steps to see the marks on Argyle's Tower. There are mason's marks to the left of the door into the tower and around the window of the tower.



Each signature was made up of up to five straight lines and carved with a chisel.



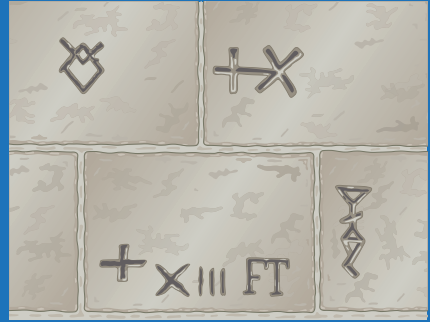
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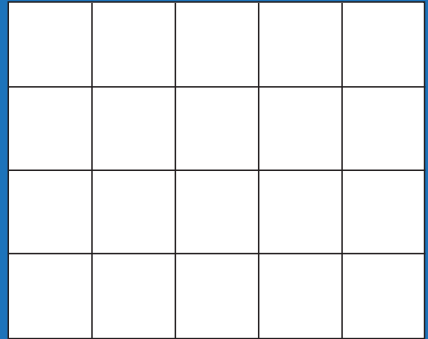
**National
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Find a mason's mark in the castle and copy it. Find the mark's lines of symmetry.



Create your own mason's mark with 2 or more lines of symmetry.

