

27 September – 3 October 2021

How did maths shape Edinburgh Castle and make life within it possible? We have adapted our Castle Quest to use at home, in school or outside.

These activities are aimed at P5-7 pupils and cover aspects of Numeracy and Mathematics and Social Studies areas of Curriculum for Excellence.

Social distancing measures should be observed at all times when completing activities in public.

Shape spotters

Edinburgh Castle is made up of lots of different shapes. Each

discuss why you think each item is that shape?

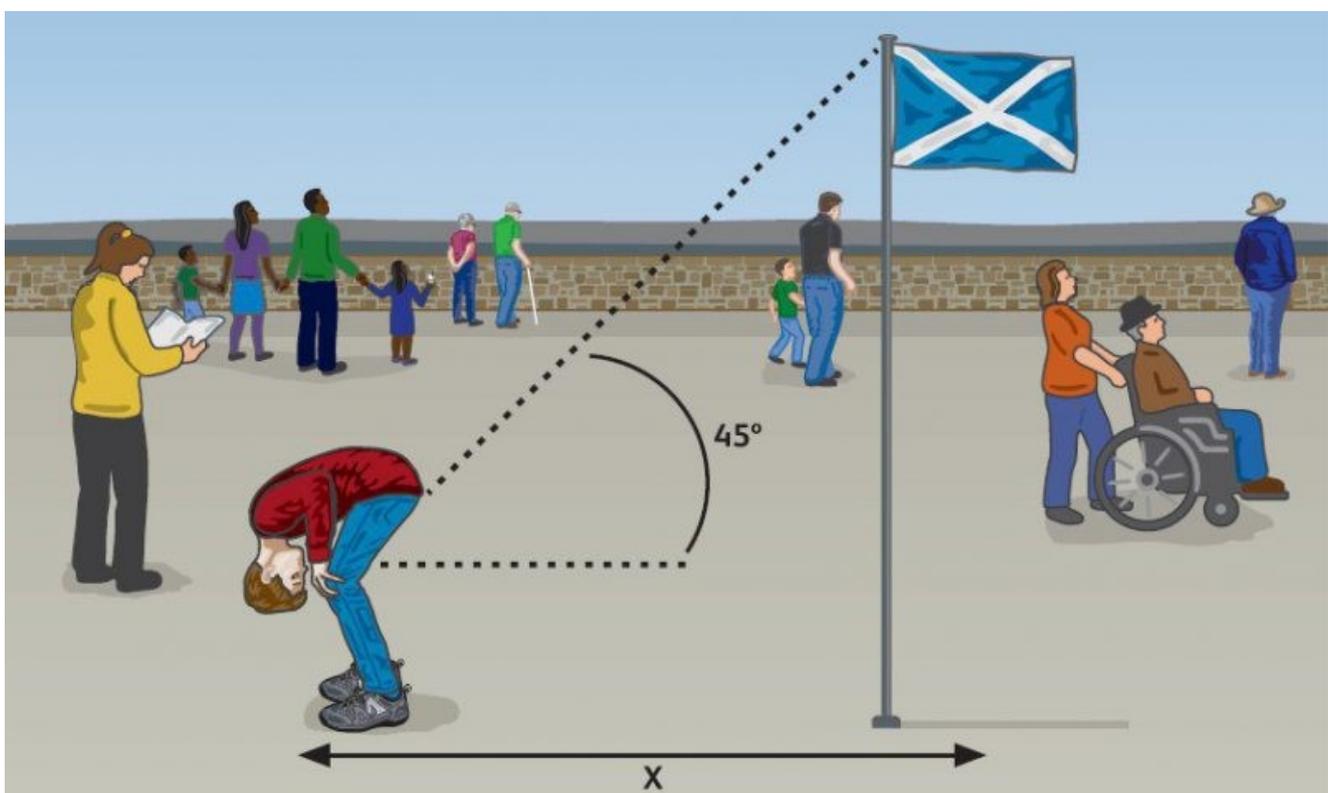
- ▶ Cylinder
- ▶ Rectangle
- ▶ Arch
- ▶ Triangle



Measuring using shadows, compasses and other handy pointers

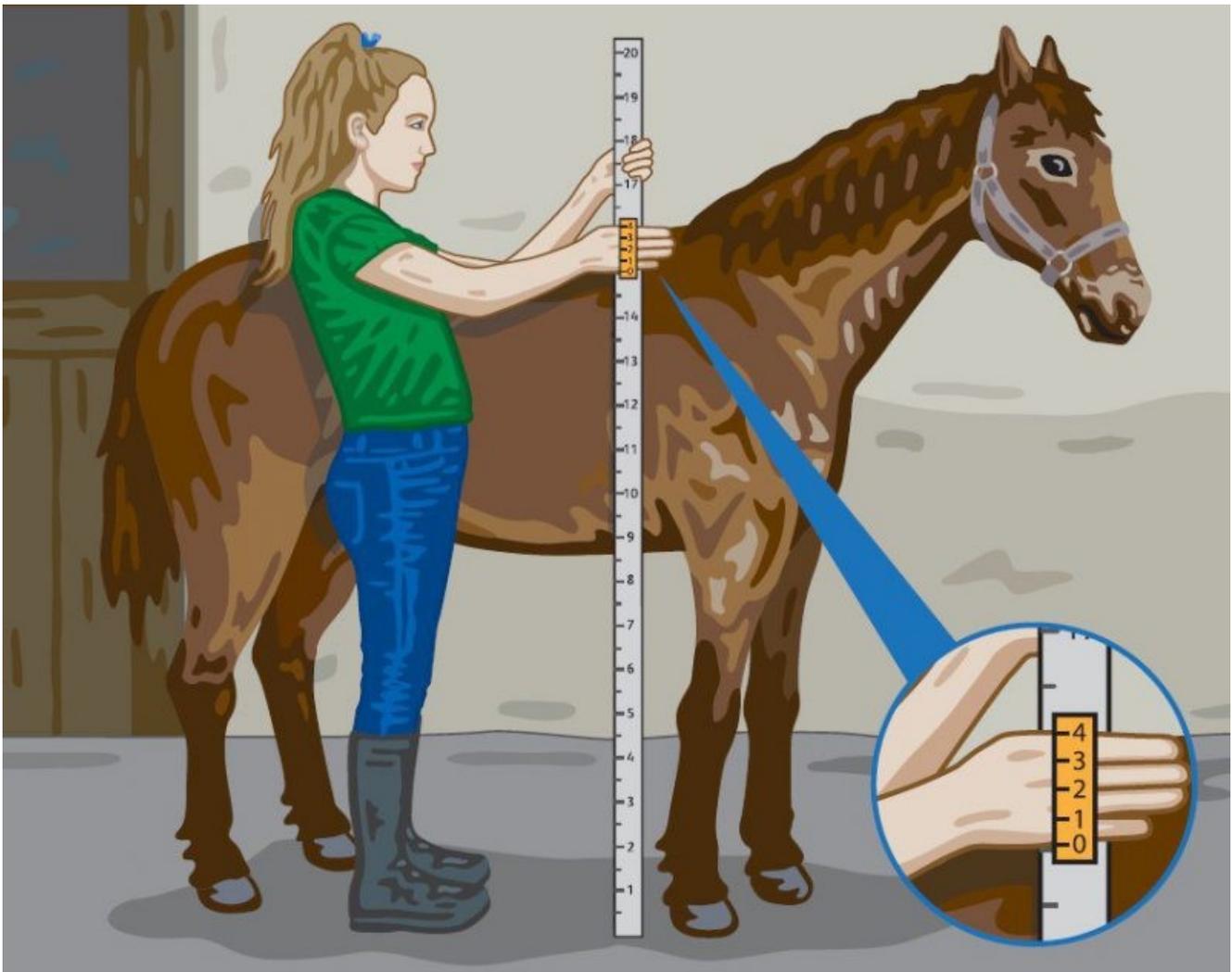
Have a go at working out the height of an tree, pole or building either out in the garden or when out for a walk.

1. Pick a landmark and stand at it's base. Estimate it's height
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



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.



Work out how tall you are in hands.

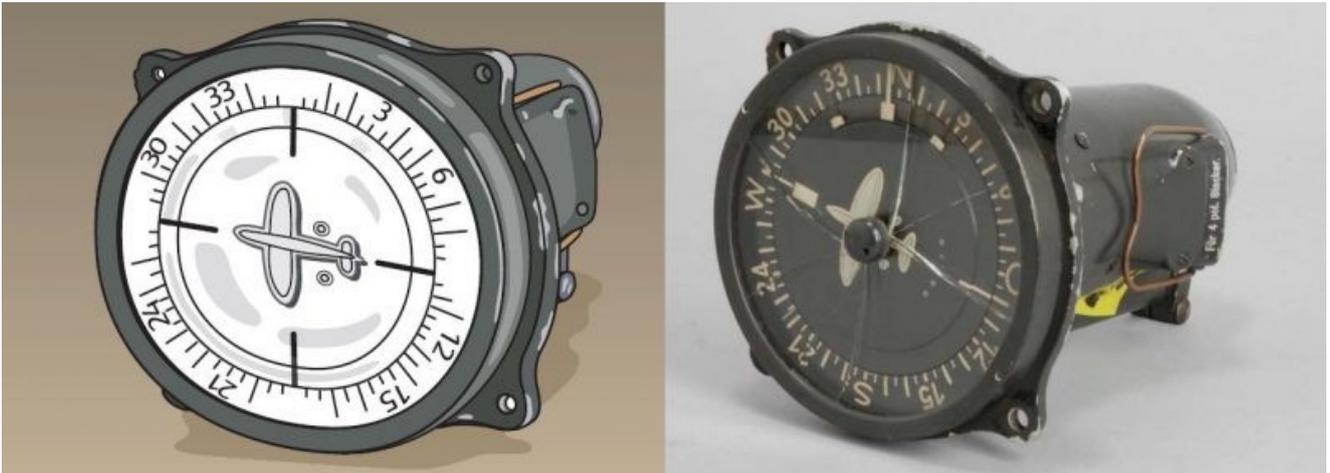
Measure yourself in inches using a tape measure or ruler. If 1 Hand (hh) is equal to 4 inches, you need to divide your measurement by 4.

Find your way

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

Work out where North, South, East and West would go on the drawing below using the photo of this compass in the National War Museum.

Why do you think there is an O on the compass?



During attacks the castle had 120 soldiers. If each soldier needed 5 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?

Mason marks

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





This trail has been adapted for home learning whilst Edinburgh Castle is closed to visitors. You can find the original trail and teachers notes below



