

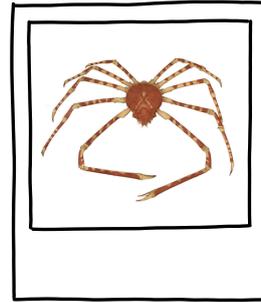
# Wild Maths

Maths is all around us - in nature, wildlife, natural forces, the stars, and so much more. Take a walk around the Natural World galleries and see how much wild maths you can spot in the museum's collections!

## Level 1 - Animal World gallery

**Size and scale:** Which do you think is longer, the leg span of a giant spider crab or the wingspan of a wandering albatross?

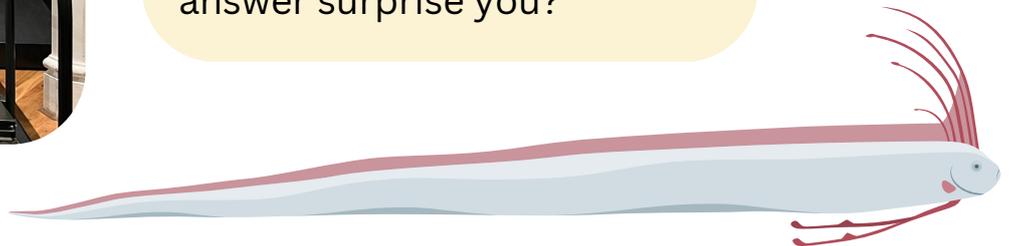
Find both animals in the gallery and compare them.



### Head to the Animal weigh-in.

Can you predict which animal weighs the same as everyone in your group?

Step on the scale to find out!  
Were you correct? Did the answer surprise you?



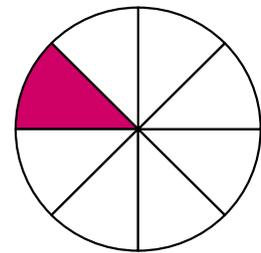
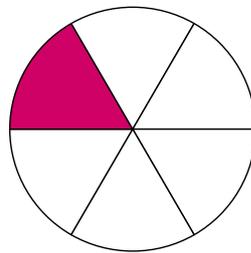
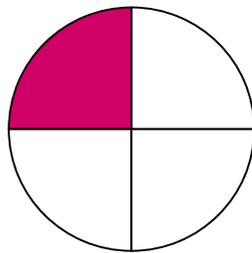
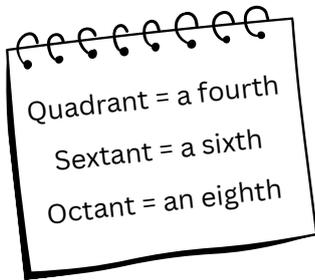
### Look up! Can you spot the Scottish oarfish hanging high on the wall?

How many steps long do you think it is? Walk underneath it from head to tail, counting your steps as you go. How close was your estimate?

Ask the other people in your group to have a go. Do they get the same answer or a different one? Why might that be?

## Level 1 - Earth in Space gallery

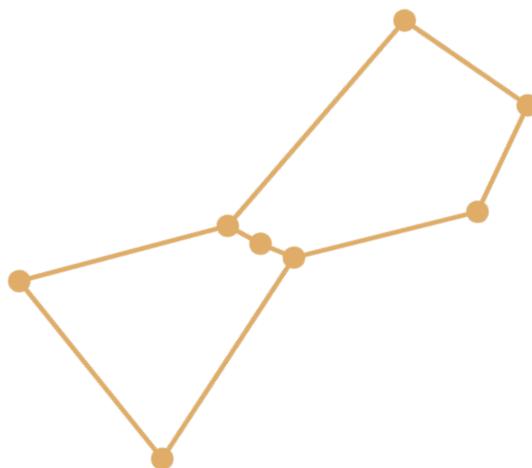
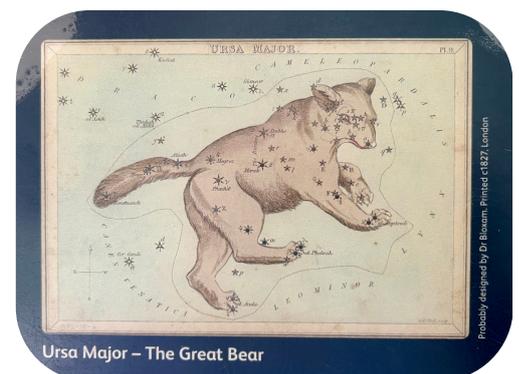
**At sea - Mapping the world:** Find the display of instruments used for navigation at sea. Octants, Quadrants and Sextants are measuring instruments that are all named after fractions of a circle.



Which is bigger, two quadrants or three octants?

How many sextants equal half a circle?

**Take a look at the star wall.** People have often noticed patterns in the stars - these are called constellations. The constellation URSA MAJOR, Latin for Great Bear, got its name because someone thought it looked like a big bear.



Here's part of the larger constellation 'Orion'. Can you spot it on the star wall? Use your imagination and draw around the stars to show what you think it could be.

## Level 3 - Animal Senses gallery

**Super senses:** Many animals are able to experience the world around them, using senses that humans don't have. Can you match the homing pigeon, the cicada and the malleefowl each to one of these maths-related skills that their super senses make them especially good at?

detecting  
electricity

measuring  
temperature

navigation



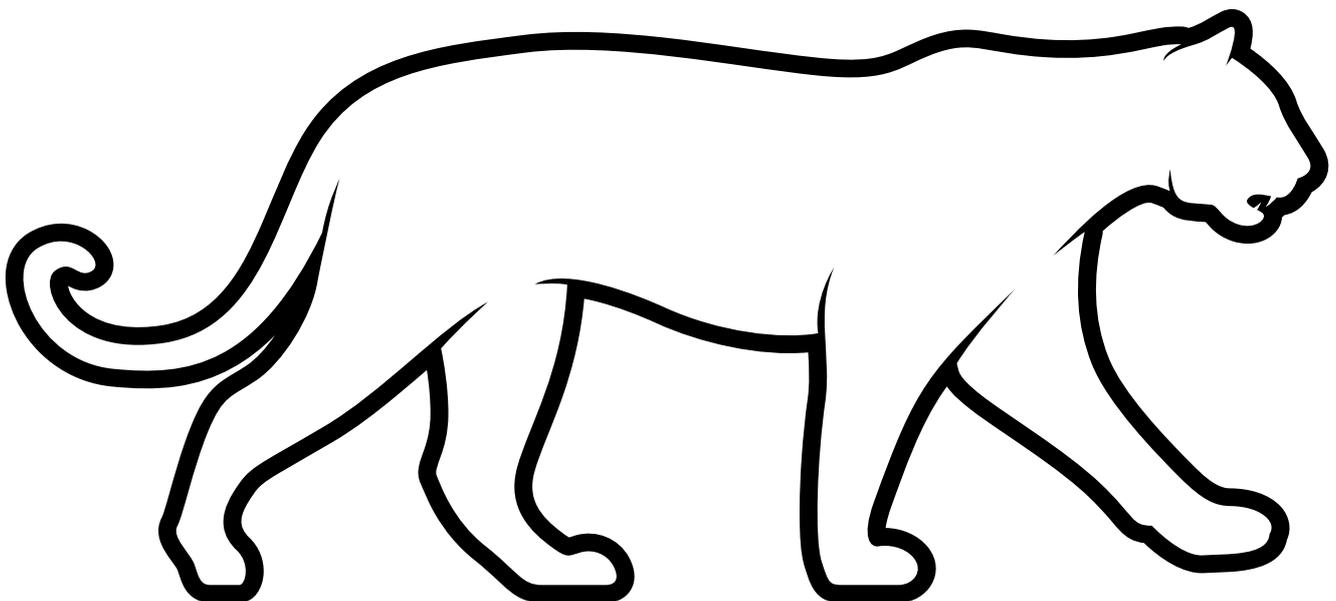
telling time

mental  
arithmetic

making shapes

What super sense would you like to have, and what would it measure?

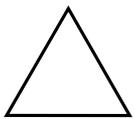
**Spots, stripes and splashes:** Spots and stripes are perfect for blending into forest leaves or reeds on riverbanks. But what if a cat tried to hide in your bedroom, your classroom, or even at a football match? What kind of camouflage pattern would it need then?



Choose somewhere for this big cat to hide in  
and draw a camouflage pattern for it.

### Level 3 - Restless Earth gallery

**Marvellous minerals:** The type and size of minerals depends on temperature, pressure, and the chemicals around them. Pyrite is known for forming almost perfect cube-shaped crystals. But what about other shapes? Can you spot the shapes below in any of the other minerals on display? Write down their names.



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\_\_\_\_\_



\_\_\_\_\_

### Level 5 - Survival gallery

**Variation on a theme:** Look for the display of Garden Tiger Moths. Do they all look the same to you? Each one varies slightly in size, shape, or colour - even if the differences are tiny.

Draw three moths which look similar but have variations in their size, shape or pattern.

How different are you from the people you're with? Take a look in the **Human variations** mirror and see for yourself!

**End your Wild Maths trail in the Adventure Planet gallery on Level 5, where there is lots more maths to explore!**