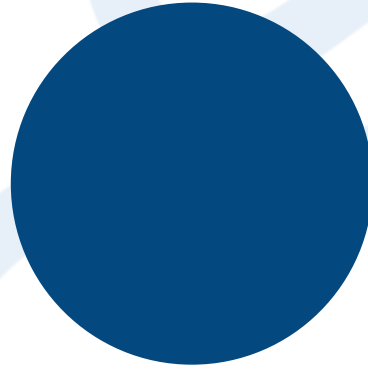


Maths Activity: Fractions

Lots of old coins have been found in the River Tees and the River Wear. Look at this old coin. What shape is it?

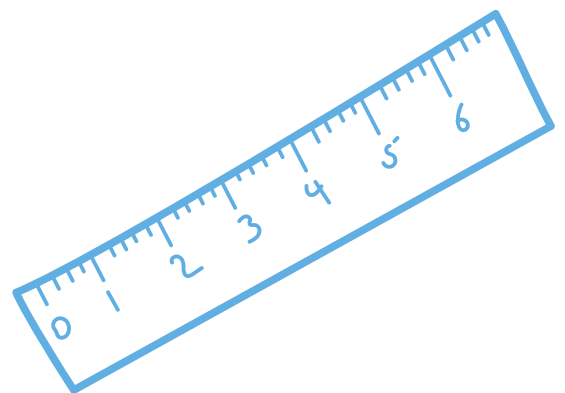
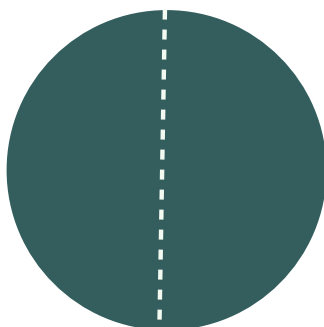


It's a circle!

Can you name any other objects which are also shaped like circles?

For an extra challenge, what do you know about circles?
How many sides do they have?

For an extra challenge, try drawing a straight line using a ruler down the middle of the circle above. This is called a line of symmetry. Put a mirror on the line. Is the circle the same on both sides when it is reflected? That means the object is symmetrical, which means each side is a perfect reflection of the other.



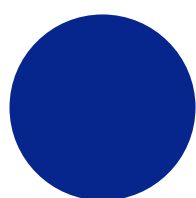
Some coins were cut into pieces before being thrown into the river, like this:



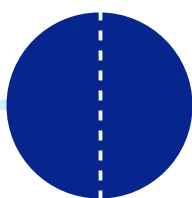
Let's pretend you are about to throw a coin in the river - first you need to cut it!

Cut your coin into two equal pieces. This is called a half. A half is what you get when you share something into two equal pieces. If you put your two halves together, they make a whole.

Sharing something out into pieces like this makes fractions.



Whole



Divide into two equal pieces



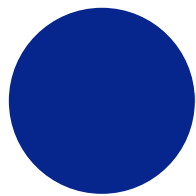
One half



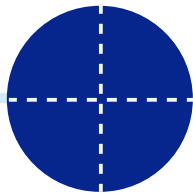
Two halves

For an extra challenge, do you know how to write out a half as a fraction?

Now cut your halves into two. This makes a quarter, which is what you get when you share something into four equal pieces. If you put your four quarters together, you get a whole.



Whole



Divide into four equal pieces



One quarter



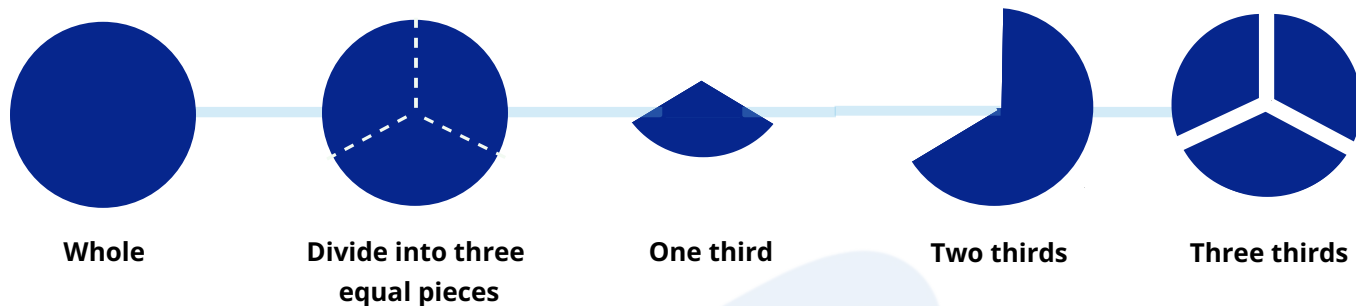
Two quarters



Four quarters



For a challenge, cut another coin into halves. Then cut one half into two to make quarters. If you put your two quarters together, what do you make?



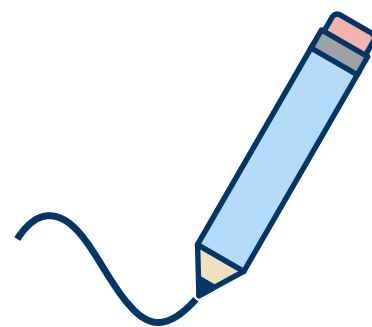
Experiment with your coins by cutting them into equal pieces and moving them around. You can cut them into halves and quarters. For an extra challenge, try cutting some coins into thirds - see if you can find one third, one quarter, two quarters and three quarters and write them out as fractions below.

One third: _____

One quarter: _____

Two quarters: _____

Three quarters: _____



For a final challenge to stretch yourself, try using the fractions you have cut out to help you answer the following questions:

$1/2$ of 2: _____

$1/4$ of 4: _____

$1/2$ of 4: _____

$1/2$ of 8: _____

$1/2$ of 6: _____

$1/2$ of 12: _____

$1/2$ of 8: _____

$1/2$ of 16: _____

$1/2$ of 10: _____

$1/2$ of 24: _____