

UNIT 1 LESSON 3

START (10')

Double or halve any whole number up to 100.

Ask a child to write a two-digit number on the board and ask the class to halve or double it:

How much is double.....?

How much is half....?

Children write the answer down as quickly as they can on their whiteboards.

Draw out the link between halving and dividing by 2, doubling and multiplying by 2.

What can we do to find the doubled amount of a number?

What can we do to find half the amount of a number?

Repeat with children suggesting different numbers, ensuring that some odd numbers are halved.

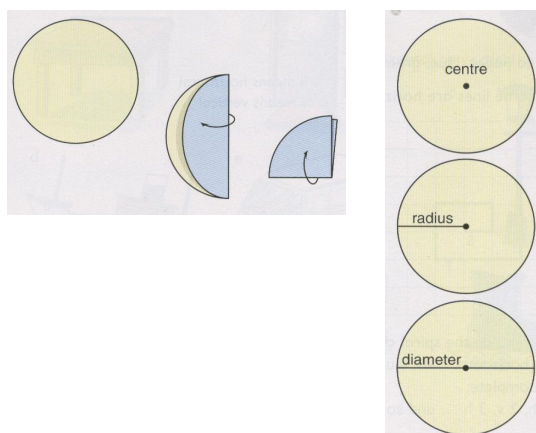
MAIN TEACHING (40')

Fold a paper circle in half. Then fold it in half again. Mark and label the centre. Draw and label a diameter and a radius:

Who knows the name of the line which divides the circle in half?

What's the radius?

Stick the circle in your notebook.



Find the circumference of 5 different circular objects (every children bring one circle object) by placing a string around each object (put the string around the top rim).

Remove the string, and using a ruler, measure the length of the string used around each item.

Write your findings in a table (worksheet 1.5):

What's the relationship between the diameter and the radius?

Use a calculator to divide the circumference of each circle by the diameter of the circle. Write the results in your chart.

Compare the results in column 4 for each item:

What can you say about the results in column 4?

Which is the inverse calculation of division?

How can you use the results to find the circumference of any circle?

“The distance across the middle of the circle is called the diameter.”

“The centre point is called the origin.”

“The distance from the centre to any point on the circumference is called the radius.”

“The circumference of a circle divided by its diameter is always the same number. The Greeks called this number pi. The value of pi is about 3.14.”

ENDING (10')

Calculate the circumference of your bicycle tire (worksheet 1.6)

Explain how to do the worksheet.

RESOURCES

Whiteboard, whiteboard pen, paper circle, notebook, pencil, string, 5 circle objects, calculator, worksheet 1.5, 1.6.