

Halves – length

National Curriculum attainment target

- Recognise, find and name a half as one of two equal parts of an object, shape or quantity

Lesson objectives

- Recognise and find one half (or $\frac{1}{2}$) of a length
- Understand that a half is one of two equal parts

Previous related lessons

Unit 4, Week 2, Lessons 1 and 2

Prerequisites for learning

Pupils need to:

- understand that a 'fraction' is part of one whole
- recognise that fractions involve sharing 'fairly' or equally
- have practical experience of measuring length in standard units (centimetres) using a tape measure or ruler

Vocabulary

whole, half, halve, fraction, divide, share, equal

Future related lessons

Unit 4, Week 2, Lesson 4; Unit 8, Week 2, Lessons 1–4; Unit 12, Week 2, Lessons 1–4

Success criteria

Pupils can:

- recognise half of a length
- find half of a length



Getting Started

- Choose an activity from Number – Fractions.

Collins
Connect
Year 1, Unit 4,
Week 2

Teach

Resources

length of string and scissors (per pair); tower of 10 interlocking cubes (per pair)

- Hold up a length of string. Cut it into two pieces, one piece is much longer than the other.
- Ask: **Have I cut this string in half? It's in two pieces, so doesn't that mean each piece is one half?** (no)
- Cut another piece of string into two pieces, this time with one piece only a little longer than the other.
- Ask: **Now have I cut this string in half?** (no)
- Discuss with children why neither string was cut in half. Encourage them to recognise that, for a piece of string to be cut in half, it must be cut into two pieces the same length.
- Say: **We halve something by sharing it equally between two. We make two parts that are exactly the same size.**
- Distribute lengths of string and scissors.
- Ask: **Can you work together to find a way to cut your string into two halves?**
- After children have had time to work on the task, discuss it together.
- Ask: **How did you find half? What did you do?** Encourage children to explain that the string can be halved by matching the ends to make two equal lengths, then cutting at the midpoint.
- Ask: **Did anyone think of a different way?** Discuss children's suggestions. Prompt them, if necessary, to consider how a ruler could be used to find half of the string's length.
- Next, hold up a tower of 10 interlocking cubes.
- Split the tower into two parts, 7 cubes in one part and 3 in the other.
- Ask: **Have I split this cube tower in half?** (no)
- Start again with a tower of 10 cubes and split it into 6 and 4 cubes.
- Ask: **Now have I split it in half? Why not?** (the two parts are not the same size)
- Give each pair a tower of 10 cubes.
- Ask: **Can you split your tower in half?**



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2-4

- After children have had time to work on the task, discuss it together.
- Ask: **How did you find half?** Encourage children to explain how to make halves: keep breaking and matching the tower until both parts are the same size; or count the number of cubes and make sure each part has the same.
- Display: Slide 1, showing a ribbon.
- Say: **If we want to find half of a length, we can measure it with a ruler and find the length in centimetres.**
- Click to reveal the ruler. Explain that the length of the whole ribbon is measured first and then halved.
- Remind children about their work on halving numbers.
- Ask: **If the ribbon is six centimetres long and I cut it in half, how long will each half be?** (3 cm)
- Click to show the ribbon cut in half and each half measured to check.
- Display: Slides 2–4 and repeat for children to find half of several other lengths.

Individualised Learning

Refer to Activity 3 from the Learning activities on page 191.

Activity Book 1A – Page 44: Half a scarf

Resources: ruler (per child); coloured pencils (per child)

Progress Guide 1 – Support, Year 1, Unit 4, Week 2, Lesson 3: Cube tower halves

Resources: coloured pencils or crayons (per child)

Plenary

Resources

tower of 10 interlocking cubes (per class)

- Show two towers of 10 interlocking cubes.
- Say: **When we share something equally between two, we are halving it.**
- Hold up a tower of 10 interlocking cubes.
- Say: **This cube tower has 10 cubes in it.** Count the cubes.
- Split the tower into two equal parts, 5 cubes in each.
- Say: **We have just split this tower of ten cubes into two equal parts.** (Hold up the two parts to show they are the same size.) **Each part is one half of the tower we started with. There are five cubes in one part (count) and five cubes in the other part (count).**
- Reinforce the fact that halving involves sharing equally into only two parts, and no more.
- Say: **We can say that half of ten is five** (show the tower of 10 cubes being split into two half-towers).
- Say: **We can also say that double five is ten** (join the two half-towers). **Five add five makes ten.**