

A Guide to Fractions

Maths Equipment

In this guide we use bar models to help children visualise how to find a fraction of an amount.

Bar models can be drawn on a mini whiteboard or paper or you may prefer to give your child ready-made bar models.

Bar models

Halves

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Thirds

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Quarters

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Fifths

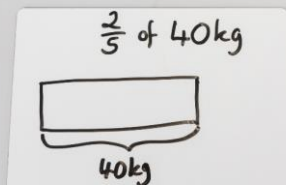
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1

$$\frac{2}{5} \text{ of } 40\text{kg}$$

We are going to work out $\frac{2}{5}$ of 40 kg

2



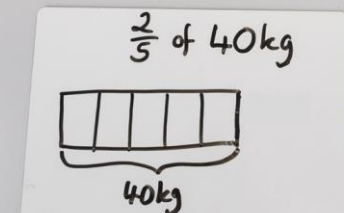
Ask your child what the whole is. That's right, it's 40 kg. Get them to draw a bar (or rectangle) and label it 40 kg to show the whole.

3



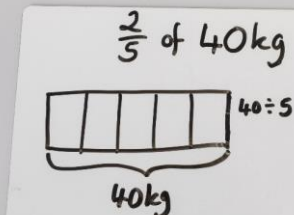
Ask, "How many parts should we split the bar into?". We are finding two-fifths so we should split the bar into 5 equal parts.

4



Ask your child to explain how the bar model represents the question.

5



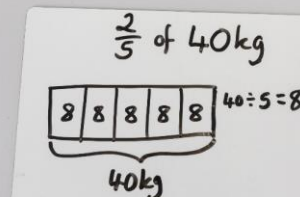
Ask, "How can we work out the value of each box?". The whole is worth 40 and there are 5 equal parts so we should do $40 \div 5$

6



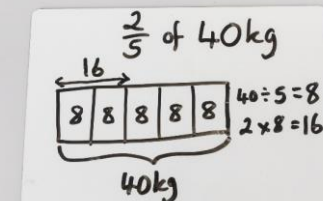
$40 \div 5 = 8$ so ask your child to write 8 in each part. Remember this stands for 8 kg, therefore $\frac{1}{5}$ of the whole is equal to 8 kg.

7



Ask "If we know that $\frac{1}{5}$ of 40 kg is equal to 8 kg, how can we find $\frac{2}{5}$ of 40 kg?"

8



That's right, to find $\frac{2}{5}$ we need to find the total value of 2 of the parts. $2 \times 8 \text{ kg} = 16 \text{ kg}$ therefore $\frac{2}{5}$ of 40 kg = 16 kg.

Now Try These

$$\frac{3}{5} \text{ of } 20 \text{ cm}$$

$$\frac{3}{4} \text{ of } 20 \text{ cm}$$

$$\frac{2}{3} \text{ of } 36 \text{ kg}$$

$$\frac{5}{6} \text{ of } £120$$

Remember to write down all the steps in your calculation too.

Printouts – Bar Models

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Printouts – Bar Models

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Printouts – Bar Models

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