

Maths activity for children aged 5-6: building number sense

Building a solid foundation and understanding of number is a vital first step towards deeper mathematical understanding. This activity for children aged 5–6 helps reinforce the concept of number sense and lets children practice using mathematical terms.

Questions to help learners build number sense

When prepping lunch or a snack, try counting out the different types of food. How many grapes are there? How many tomatoes? Practice using the terms '*more than*' and '*fewer than*' by asking, "*are there more grapes than tomatoes*?" Remember to practice both sentences:

There are **more** grapes **than** tomatoes. There are **fewer** tomatoes **than** grapes.

Then when you lay the table, ask your child to count the number of plates. Ask, "*are there as many plates as family members eating*?" This way you can practice the phrase '*as many as*'.

Top tip: When counting, make sure that you count one number for one item. This is called **one-to-one correspondence**, and it helps build your child's foundation of counting and number.



Maths activity for children aged 6-7: developing a sense of time

Cooking with your child is an excellent opportunity to practice telling the time and understanding time durations. Try this activity with children aged 6-7 to build their sense of time and practice their skills.

Questions to help learners develop sense of time

Ask your child to help you prepare your next meal. When you start prepping the food, ask them, "*what time is it now*?"

When you've finished, ask them, "*how long did it take to prepare the food*?" This way, your child will need to find a time and work backwards to find how much time has passed.

When you're putting the food in the oven, tell your child the amount of time the food will need to cook. Then ask them, "*at what time will the food need to come out*?" Now you're asking your child to go forward in time. Ask them to reflect on the time it took by asking questions like, "*which took longer, to prep the food or to cook the food*?"

Top tip: You can practice using positioning terms with your child by discussing the order of the actions you took. Can they remember what you did to prepare the food? Use words like 'before', 'after', 'first', 'second' and 'third'.



Maths activity for children aged 7-8: connecting fractions with food

Fractions can feel intimidating, but they're easier to understand when you use a concrete representation, like food. It might be difficult to picture what $\frac{3}{8}$ looks like because it's an abstract concept. But cutting a cake into 8 slices, and giving out 3 of those slices to friends? That makes sense because now it has context and meaning.

If you've just made a cake or a casserole, you can practice this activity with children aged 7–8 to give them a practical way to think about fractions.

Questions to help learners connect fractions with food

Start with a food item in a round, rectangular or square tin. Help your child cut the food into halves and ask, "*how do you know you've cut it into halves*?" Here, they need to understand that they've cut the food into two equal parts, so each part is 1 half. Now, can they make quarters? This is practicing **equivalent fractions**, as we can cut each half in half again to make quarters. *What is 1 half the same as? Can they see that 1 half is the same as 2 quarters?*

If you helped them to make quarters, can they apply what they learned to make eighths?

Top tip: With this activity, try making up problems like, if we took away 3 slices or 3 eighths, how many are left? Can they write down what they've learned in their journal?



Maths activity for children aged 8–9: making sense of mass

Following a recipe is a useful life skill, but you need an understanding of maths and measurement to follow a recipe properly! Give this activity a go with children aged 8–9 to help them relate their maths skills to using a recipe at home.

Questions to help learners make sense of mass

When you're cooking, ask your child to read the recipe out loud to you and help you measure ingredients.

Can they measure the ingredients in grams or kilograms? Can they convert the measurements from grams to kilograms, and kilograms to grams? Can they estimate masses to the nearest kilogram? If you have a set of analog scales, do they know what each dash represents? How can they make sure they're measuring the mass accurately?



Maths activity for children aged 9–10: visualising volume

It's time to think *inside* the box! With this activity for children aged 9–10, ask them to look at the volume of the containers you're using. How much food can you realistically fit in that pan or plastic container?

Questions to help learners visualise volume

Find a container that's a cube or cuboid, and ask your child to estimate the volume of the container.

What resources can they use to help them? How many different ways can they find to calculate the volume of the container? How would they estimate the volume of a rounded container like a jug or jar?



Maths activity for children aged 10–11: converting measurements

Sometimes you'll need to double or half your recipes. Or maybe you'll want to try a recipe that uses imperial measurements instead of metric. Building the skills to adapt cooking and baking measurements is a great way for your child to practice measurement conversions.

Questions to help learners convert measurements

Ask your child if they can tell you how many grams there are in a kilogram. Can they convert all the measurements in a recipe from grams to kilograms, or kilograms to grams?

Can they tell you how many millilitres there are in a litre? Can they convert all the liquid ingredients in the recipe from millilitres to litres, or litres to millilitres?

Try and find a recipe that uses imperial measurements. If you tell them that 1 ounce is approximately 30 grams, can they convert all the imperial measurements to metric? Talk to them about the difference between imperial and metric units. Do they know why metric units are used more often globally?