

# Supporting children with everyday maths (11-16 years)

However you might feel about maths and money, you can make a huge difference to building your child's financial confidence. All the evidence shows that talking about everyday maths helps children develop stronger numeracy skills and a positive attitude towards managing money.



This tip sheet has been created in collaboration with National Numeracy; the independent charity whose mission is to empower people to thrive by using numeracy to open up opportunities and access brighter futures targeting communities where the need is greatest. [nationalnumeracy.org.uk](https://nationalnumeracy.org.uk)

## Top tips for supporting positive attitudes towards maths:

- You're not alone** – Reassure the child that however they feel about maths, they are not alone. Many people feel anxious about numbers, and it doesn't mean that you're 'not a maths person'.
- Value** – It's important for children to know the benefits that improving their numeracy will bring. Ask them to think about one task they regularly do at home or in a hobby. What numbers are involved? Remind them that this is maths and discuss how it is useful and important in everyday life.
- Belief** – Help children understand, accept and recognise that maths ability isn't fixed. Maths is one of the first subjects in which children are put into sets, so at an early age they are led to believe they are either good or bad with numbers... but there is no evidence that there is a 'maths gene' that makes some people better at maths. The reality is that anyone can improve their numeracy skills, and it's surprising what you can do once you believe this.
- Persistence** – Help children understand that struggling and failing are a normal part of learning. Just like when playing a video game, you fail, then have another go until you improve, you will get better at maths with effort. Everyone finds new skills difficult at first, but with time, effort, and persistence, improvement will come. Use examples from their life, such as learning a musical instrument, or even to drive, where they've overcome challenges. Learning maths is no different, it just takes patience and perseverance.

Try the following shopping activity to help your child engage with everyday numbers. You can even use this as a template for real shopping trips to give your child more opportunities to practise their skills.

## The National Numeracy Challenge

You can support the children in your life no matter how you feel with maths, but it will help to feel more confident with it yourself.

The National Numeracy Challenge is a free online learning tool for adults and children aged 13+ to improve skills and confidence with maths.

Why not have a go? [nationalnumeracy.org.uk/challenge](https://nationalnumeracy.org.uk/challenge)

# Family maths activity: Weekly shopping

All families need to buy food, and this forms a significant part of our spending each week.

Below is a receipt from the Lee family. Discuss the following questions with your child. You can find answers and tips on the next page.

- How much have they saved by taking advantage of the items on offer?
- Often in daily life, an estimate will do – you don't have to work out the exact answer. Estimate the total weight of this shop without working it out exactly, and then explain how you went about making this estimate. If two people are doing the shopping, do you think they can carry this home without a vehicle?
- One week, the supermarket has an offer of an additional 20% off all fruit and vegetables. Estimate how much more this would save the Lee family on this shopping list.

Quantity	Item	Cost each	Total cost
1	Spreadable butter 500g	£3.50	£3.50
2	Oaty biscuits 300g (on offer, usually £0.75)	£0.50	£1.00
1	Granary bread 800g	£1.45	£1.45
1	Red seedless grapes 500g	£2.00	£2.00
1	Potatoes 750g	£1.79	£1.79
1	Baby plum tomatoes 325g	£1.00	£1.00
1	Couscous 250g	£2.25	£2.25
1	Braeburn apples 5-pack 600g	£1.60	£1.60
1	Blueberries 125g	£0.89	£0.89
1	Assorted biscuits 365g (on offer, usually £2.48)	£2.00	£2.00
1	Mixed sliced vegetables 160g	£1.50	£1.50
2	9 soft toilet rolls 850g (on offer, usually £4.50)	£3.75	£7.50
2	4 ice lollies 160g (on offer, usually £4.25)	£3.75	£7.50
1	4 rhubarb yoghurts 480g	£1.00	£1.00
2	20 fish fingers 560g (on offer, usually £3.00)	£2.50	£5.00
	<b>Total cost</b>		<b>£39.98</b>

## Activity tips:

The savings made in the exercise are:

Quantity	Item on offer	Saving per item	Total saving
2	Oaty biscuits 300g (on offer, usually £0.75)	£0.25	£0.50
1	Assorted biscuits 365g (on offer, usually £2.48)	£0.48	£0.48
2	9 soft toilet rolls 850g (on offer, usually £4.50)	£0.75	£1.50
2	4 ice lollies 160g (on offer, usually £4.25)	£0.50	£1.00
2	20 fish fingers 560g (on offer, usually £3.00)	£0.50	£1.00
	<b>Total saving</b>		<b>£4.48</b>

# Family maths activity: Weekly shopping

- The actual total weight of the shop is almost 9kg. An old rule of thumb is that you are able to carry one third of your body weight. Do children know how much this is (without asking them to share it)? Many health and safety guidelines suggest that 16kg should be a maximum weight for one person to carry. So, two people are likely to be able to carry this shopping home, but of course this depends on the people.
- The actual savings from an additional 20% off fruit and vegetables in this shop come to £1.76. Again, how did your child go about estimating this?

**To build on this exercise, you can apply it to real life:**

- Did you get any special offers or savings – maybe you used coupons or bought larger packs to save money?

**Go to a shop (or look online), and find 5 special offers:**

- What percentage do they save the customer on average?
- Would you recommend them to the person paying the bill?
- Are 'special offers' always good value for money?