Math Talk Questions

Ask one, then wait. Then ask how they know.

When	Ages 3–5	Ages 5–7	Ages 7–9
Snack or dinner	How many grapes do you have? How do you know?	If we share these 10, how many each? How did you work it out?	Half for you, half for me: how many is that? Is there another way to split them?
Getting dressed, tidying	Which pile has more? How can we check?	How many more socks to make 10 pairs?	How many shoes are in the hall? How did you count them so fast?
A walk or the car	What shapes do you see? How are these two the same?	Which is taller, that tree or the house? How could we find out?	How long until we get there? How do you know?
Toys, blocks, a game	Can you make a pattern? What comes next?	Is there another way to make 8 with these?	What would happen if we changed the rule?
Shopping, money	Which is heavier? How can you tell?	Which coin is worth more?	Do we have enough for both? How did you figure that out?

Keep it going, at any age

What did you do first? | Is there another way? | How do you know?

Math Talk Questions

Cut out the cards. Keep a few in the car or by the snacks.

Snack or dinner Ages 3–5 How many grapes do you have? How do you know?	**Snack or dinner** Ages 5–7 If we share these 10, how many each? How did you work it out?	**Snack or dinner** Ages 7–9 Half for you, half for me: how many is that? Is there another way to split them?
Getting dressed, tidying Ages 3–5 Which pile has more? How can we check?	**Getting dressed, tidying** Ages 5–7 How many more socks to make 10 pairs?	**Getting dressed, tidying** Ages 7–9 How many shoes are in the hall? How did you count them so fast?
A walk or the car Ages 3–5 What shapes do you see? How are these two the same?	**A walk or the car** Ages 5–7 Which is taller, that tree or the house? How could we find out?	**A walk or the car** Ages 7–9 How long until we get there? How do you know?
Toys, blocks, a game Ages 3–5 Can you make a pattern? What comes next?	**Toys, blocks, a game** Ages 5–7 Is there another way to make 8 with these?	**Toys, blocks, a game** Ages 7–9 What would happen if we changed the rule?
Shopping, money Ages 3–5 Which is heavier? How can you tell?	**Shopping, money** Ages 5–7 Which coin is worth more?	**Shopping, money** Ages 7–9 Do we have enough for both? How did you figure that out?

For Grown-Ups: How to Use These Cards

For ages 3 to 9, at the table, in the car, or at the shops.

Why use it

Math talk is everyday conversation with your child about numbers, shapes, and amounts. A practice guide for teachers of young children (IES, 2014) recommends open questions that ask how a child knows, not only how many; its evidence for this is rated minimal. These questions follow that pattern at home.

What it is good for

- A question a day in a moment you already have.
- Asking how your child knows, not only how many.
- Three follow-ups that work at any age.

How to use it

1. Put page 1 on the fridge, or keep a few cards in the car.
2. Ask one question in the moment it fits.
3. Wait five seconds before helping.
4. Ask how they know, then say their way back to them.
5. Stop while it is still fun.

> **Try saying:** “How did you work that out? Is there another way?”

Tip: Two different answers that each make sense are two right answers. Ask about both.