

to shine at maths

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Since our dyslexic brains are wired differently, our working memory makes it tricky to learn times tables or math facts. But our imaginations help us to see maths problems differently, laterally, creatively. And these are the skills needed in the future.

For now, here are 5 tips to use your dyslexic strengths in maths:

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tip

Tackling 'wordy' maths questions.

Wordy maths questions can be tricky for dyslexic learners, who are brilliant at seeing the big picture but struggle to follow multiple steps.

- Start by underlining key parts of the question.
- Break it down into smaller steps.
- Use props or draw the problem as a picture.

e.g. Board games cost £7.00. Books cost £1.50. Four children share the cost of a board game and 2 books. How much does each child pay?

Step 1

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03

Give them different strategies.

Dyslexic thinkers often see multiple ways to solve a problem. So let them choose which strategy works best for them.

• To multiply, they could use the grid method. Or they may prefer to partition the numbers e.g 5 x 53 could be broken down to. e.g.

$$5 \times 5 = (25)$$
 $25 \times 10 = (250)$ $5 \times 3 = (15)$
 $250 + 15 = (265)$ $50 \times 53 = (265)$

 To subtract, they can use the frog method. Or simply borrow and take away.

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Use physical props.

Dyslexic minds benefit from a multisensory approach to maths, so they can see, touch, hear and use movement to understand what numbers and symbols represent.

- Allow children to use cereal, pasta, beads or lego to visualise problems.
- To understand $4 \times 4 = 16$ let them count out 4 groups of 4 and count the total.
 - e.g

 By moving things around and seeing how numbers change, children have a concrete way of understanding how maths operations work.

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Draw maths problems.

Drawing is the next step on from using physical props. It still allows children to visualise the numbers and operations.

- For multiplication, ask them to solve 3 x 5 by drawing 3 groups of 5 sweets.
- For division, find out what 16 ÷ 4 is by drawing 16 dots and circling groups of 4. How many groups of 4 are there in 16? 4. e.g

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06

Celebrate the strengths.

While learning times tables by rote is tricky for dyslexics, we're great at conceptualising and imagining! Our greatest mathematician, Einstein, was Made By Dyslexia and he imagined the world! Many dyslexics have amazing 3D spatial awareness, which makes them brilliant at conceptual maths and geometry.

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Find out more:

Watch:

Our Maths training video (in 6 mins flat) https://education.microsoft.com/en-us/course/4acb190d/1

Read:

10 multisensory techniques for teaching maths. https://www.understood.org/en/school-learning/ partnering-with-childs-school/instructional-strategies/ 10-multisensory-techniques-for-teaching-math

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