

Ideas for Supporting Maths

Some problems with maths may be related to dyslexia. These problems are different from - but may overlap with - difficulties caused by dyscalculia.

Difficulties in primary school

- Learning the vocabulary of maths
- Confusion with signs such as + and \times or – and \div
- Confusion with reversing numbers such as 6 and 9 or 2 and 5
- Difficulty in memorising multiplication tables
- Directional confusion in calculations such as subtraction
- Directional confusion with tables such as bus/train timetables
- Sequencing – writing 18 as 81 or 29 as 92
- Place value
- Difficulty with mental arithmetic because of short term memory difficulties
- Difficulty with understanding a question which involves words

How to help in primary school

- Help with the vocabulary. Sometimes there is more than one expression for the same thing which can be confusing - for example 'subtract', 'take away', 'minus'
- Give as much practical experience as you can. For example, with money, use real coins to increase practical understanding and experience
- Use concrete examples to illustrate ideas. Building a tower of bricks helps with counting. Cutting a cake or pizza into portions helps with fractions
- Help raise awareness of direction, for example, working from right to left for addition. Tables might have to read from both top to bottom and from left to right
- Talk about numbers – TV Channels, dates, birthdays, house numbers, page numbers, phone numbers
- Count when skipping, scoring goals, climbing stairs (then try doing this two at a time)
- Use children's games to work on numbers. For example Connect 4, dominoes, board games such as Snakes and Ladders (great for counting forwards from different numbers, and not just from 1)
- Use terminology used in maths, including the same, more than, less than, how many, how many more
- Make games such as 'pairs' with cards to help match symbols

- Time – discuss the concepts of time in different ways, for example, day and night, early and late
- Encourage them to help with things like cooking – using weighing and measuring. By putting these skills into practical ‘real life’ tasks, it can aid understanding

Difficulties in secondary school

- Vocabulary will become more demanding
- Sequencing might be more of a problem: 3^0 3^1 3^2 3^4
- Greater difficulty with wordy problems, especially extracting the numerical information and knowing where to start with the calculation
- Knowing where to start in a calculation or remembering the correct order of steps
- Able to come up with the correct answer but be unable to show the working
- Graphs and three-dimensional work might be difficult – or it might be much easier than numerical calculations
- Algebra might be confusing

How to help in secondary school

- Help with learning and understanding vocabulary
- Read through questions together. Help extract the numerical information and work out the steps needed, perhaps by drawing simple pictures. Encourage independent working
- In an exam, marks will be given for correct working so encourage the writing down of steps during calculations
- Help with use of a calculator
- Find concrete examples where possible to illustrate a topic – for example encourage them to help with something practical like a car journey by working out the mileage and time it will take to make a journey

More information

- 📖 **Maths for the Dyslexic: A Practical Guide** by Anne Henderson
- 📖 **Supporting Students with Dyslexia in Secondary Schools** by Moira Thomson
- 📖 **Mathematics Learning Difficulties, Dyslexia and Dyscalculia** by Steve Chinn
- 📖 **What is dyscalculia?** Dyslexia Scotland, www.dyslexiascotland.org.uk

