

A guide to dyscalculia

What is dyscalculia

Dyscalculia is a learning difficulty that affects a person's ability to acquire and use mathematical skills. It's sometimes referred to as "math dyslexia." Around 25% of people experience some form of maths learning difficulty, but only about 6% have dyscalculia. Dyscalculia differs from other maths learning difficulties in the severity of challenges related to understanding and working with numbers and quantities. People with dyscalculia may experience persistent difficulties such as:

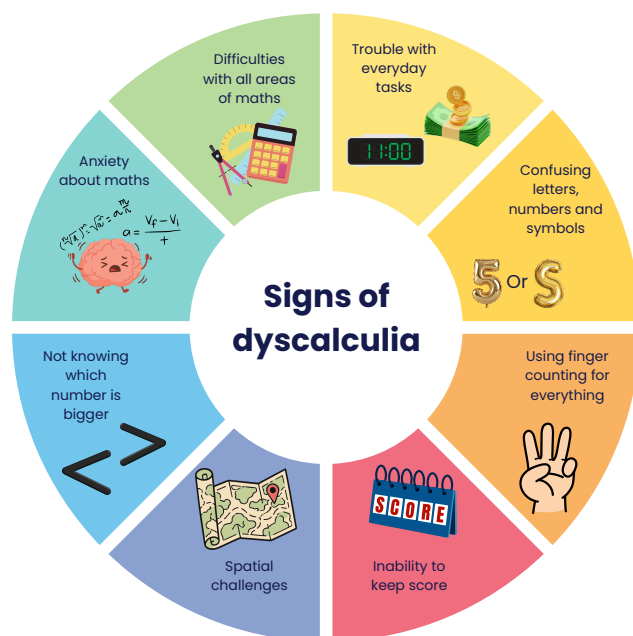
- Understanding number concepts (e.g., what "5" represents)
- Recognising numerical symbols
- Performing basic arithmetic (addition, subtraction, multiplication, division)
- Grasping mathematical relationships (such as larger/smaller, before/after)
- Estimating quantities or understanding time, money, and measurement

It is a lifelong difficulty that can present differently throughout an individual's life, depending on their age, experiences, and learning opportunities.

Traits of dyscalculia

Difficulties in:

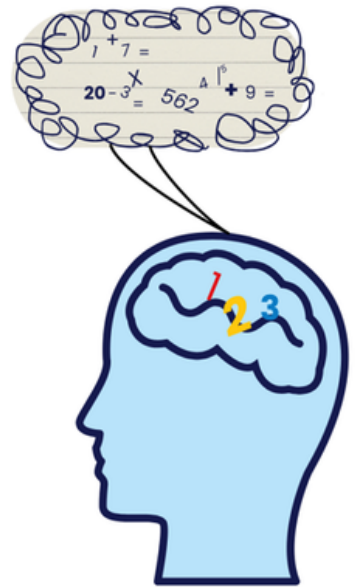
- recognising numbers and symbols
- placing things in order
- learning sequences
- grasping the properties of numbers (such as that knowing '9' is nine '1's, but also that it is three '3's)
- counting backwards
- estimating
- understanding place value (such as the difference between £500 and £5.00)
- doubling and halving
- recalling PIN or telephone numbers
- matching a number of objects to a number symbol or word
- managing time
- planning journeys and following directions
- choosing the right notes or coins to pay with
- reading a clockface
- driving at the right speed
- telling if one amount is greater than another
- using multiplication or division
- understanding distances



Causes of dyscalculia

Dyscalculia is believed to result from a combination of neurological and genetic factors that influence how the brain processes numerical information, particularly in areas such as the parietal lobe, which is involved in understanding quantities and performing calculations. Dyscalculia often runs in families and may co-occur with other learning differences like dyslexia or ADHD.

In most cases, it develops early in life and is not caused by poor teaching or lack of effort, though inconsistent maths instruction or limited exposure to numbers can make it more challenging. In rare cases, it may be acquired later due to brain injury or illness. Overall, dyscalculia reflects a lifelong difference in how the brain perceives and applies numerical concepts, but with early recognition and appropriate support, individuals can develop effective strategies to manage its impact.



How to support in unit meetings

- Complete an adjustment plan, and wellbeing plan after discussions with parents and member
- Allow more time for processing
- Use a visual timetable and give reminders
- Offer both written and verbal instructions
- Allow aids (number lines, blocks etc) and assistive technology if used at home/school
- Access further support if needed.

Remember you can get help with the costs for inclusive materials and resources. This may be available in your country and region, or with the accessible guiding grant from HQ.

Further support

<https://dyscalculianetwork.com/>

