

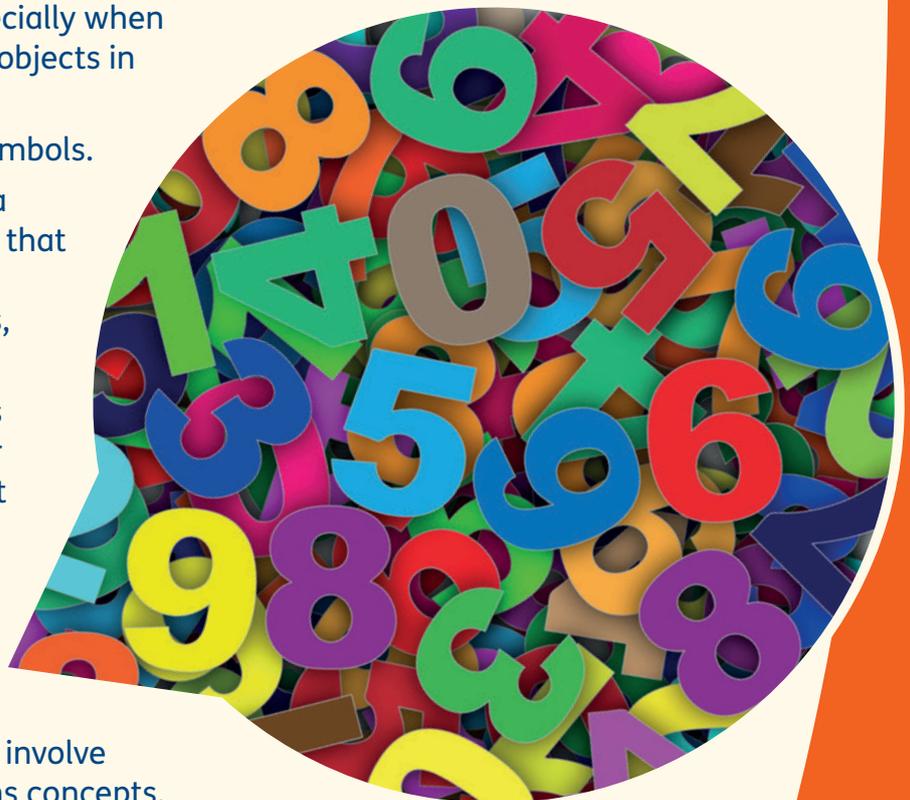
What is Dyscalculia?

Research into dyscalculia is still in the early stages compared with dyslexia. It is estimated that dyscalculia affects 4 – 6% of the population and it often co-occurs alongside other specific learning difficulties such as dyslexia and dyspraxia. Just as there is no single set of indicators that characterises dyslexia, there are a number of areas which can cause dyscalculic difficulties. There are many areas which people with dyslexia may also find difficult. These could include written number problems and difficulties caused by poor working memory.

In general, people with dyscalculia have poor 'number sense'. Number sense is an intuitive understanding of how numbers work. Number sense is at the core of maths learning. In a similar way that a lack of phonemic awareness causes people with dyslexia to struggle with reading, a lack of number sense causes people with dyscalculia to struggle with maths concepts. If individuals don't understand the basics about how numbers work, learning maths and using it every day can be very frustrating.

Signs of Dyscalculia in pre-school children

- Has trouble learning to count, especially when it comes to assigning a number to objects in a group.
- Has trouble recognising number symbols.
- Struggles to connect a number to a real-life situation, such as knowing that '3' can apply to any group that has three things in it – 3 biscuits, 3 cars, 3 toys.
- Has trouble remembering numbers and skips numbers long after other children of the same age can count and remember numbers in the right order.
- Finds it hard to recognise patterns and sort items by size, shape or colour.
- Avoids playing popular games that involve numbers, counting and other maths concepts.



Signs of Dyscalculia in Primary School

- Has trouble recognising numbers and symbols. For example making the connection between '7' and the word 'seven'.
- Has trouble writing numbers clearly or putting them in the correct order or the correct column.
- Has trouble coming up with a plan to solve a maths problem.
- Struggles to understand words related to maths such as 'greater than' and 'less than'.
- Can have trouble telling left from right and has a poor sense of direction.
- Has difficulty remembering phone numbers and game scores.
- Avoids playing games that involve number strategies.
- Has difficulty learning and recalling basic maths facts.
- Struggles to identify symbols such as +, -, ×, ÷ and use them correctly.
- May still use fingers to count instead of using more sophisticated strategies.
- Has trouble telling the time.

Signs of Dyscalculia in High School and adults

- Anxiety when it comes to numbers.
- Struggles to apply maths concepts to everyday life. This includes money matters such as estimating the total cost, working exact change and working out a tip.
- Has trouble measuring things like ingredients in a simple recipe. Would struggle to double or halve quantities in a recipe.
- Struggles with finding their way around and worries about getting lost.
- Has a hard time grasping information shown on graphs or charts.
- Has trouble finding different approaches to the same maths problem.
- Lacks confidence in activities that require estimating speed and distance, such as playing sports and learning to drive.
- Struggles to read scales such as thermometers.

It is important to note that these are just indicators and are not the same as an assessment of dyscalculia.

Further information

- www.dyscalculia.me.uk
- www.callscotland.org.uk (visit their list of Maths Apps)
- **Dealing with Dyscalculia: Sum Hope** by Steve Chinn
- **Dyslexia, Dyscalculia and Mathematics** by Anne Henderson
- Dyslexia Scotland Helpline 0344 800 8484 or helpline@dyslexiascotland.org.uk



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