

Understanding dyscalculia

What it is, how it affects learning, and how extra tutoring can help

A specific learning difficulty with number · for parents and carers of primary aged children

Dyscalculia is a **specific and persistent difficulty in understanding numbers**, which can lead to a wide range of difficulties with maths. It is far less well known than dyslexia, but estimates suggest it affects around **5 in every 100 children**, roughly one or two in every class. It has nothing to do with intelligence or effort, and it is not the same as simply finding maths hard: many more children struggle with maths for other reasons, such as missed teaching, anxiety or language difficulties.

What is going on underneath

The core difficulty is with **number sense**: an intuitive feel for what numbers mean, how big they are and how they relate to each other. Most children develop this without being taught. Children with dyscalculia need it built step by step.

- **Quantity**: seeing that a group of four dots is four without counting each one.
- **Comparing**: knowing quickly which of two numbers is bigger.
- **Place value**: understanding that the 3 in 34 means thirty.
- **Number facts**: remembering bonds and tables, so every calculation starts from scratch.

Signs in primary school

- Still counting on fingers for simple sums long after classmates have stopped.
- Counting every object one by one, even in very small groups.
- Difficulty counting backwards, or in twos, fives and tens.
- Number bonds and times tables learned one week and gone the next.
- Mixing up digits, such as writing 41 for 14.
- Difficulty estimating: is the answer nearer 10 or 100?
- Struggling with everyday maths: telling the time, money, and following a timetable.
- Using a method correctly but not knowing why, so it falls apart when the question changes.

Maths anxiety

Many children with dyscalculia become anxious about maths, and anxiety itself blocks thinking and memory. It can show as avoidance, tears, silliness or “I’m just rubbish at maths”. Breaking that cycle is often the first job.

Strengths worth noticing

Children with dyscalculia are often strong in reading, language, creativity and practical problem solving. Many have good verbal reasoning that can be used to support their maths.

Often found alongside

Dyslexia, dyspraxia, ADHD and speech and language difficulties.

“Every child learns, some just need a different path.”

Nicola, Moss Grove Tutoring

Why tutoring works well

In class, maths moves on every week, and a child without secure number sense falls further behind with each new topic. One to one, Nicola can go back to the foundations that are missing and build them properly, at a pace that lets understanding stick, before moving forward again.

What sessions look like

- **Concrete, then pictorial, then abstract:** real objects first, then drawings, and only then numbers on paper.
- **Hands on equipment** such as counters, bead strings, number lines and base ten blocks.
- **Number sense before methods**, so your child understands what they are doing and why.
- **Small steps and plenty of repetition**, revisited until facts become automatic.
- **Talking maths through**, using your child's language strengths to explain each step.
- **Games and real life:** dice, cards, shopping, cooking and telling the time.
- **Calm, low pressure sessions** where mistakes are expected and useful.

Building confidence

When a child finally understands something they have struggled with for years, their whole attitude to maths can change. Small, frequent successes matter more than racing through the curriculum.

Working together

A short update after each session shows what has been covered and suggests a quick game or activity for home. With your permission, Nicola can link with your child's teacher or SENCo so that the same models and language are used in school.

Being realistic

Dyscalculia is lifelong. Tutoring will not make it disappear, but children can make real progress in understanding and confidence, and learn reliable strategies for everyday maths. Progress is steady rather than fast. **Little and often** beats occasional long sessions.

Small things that help at home

- Play board games with dice; moving along a track builds a sense of number.
- Count real things together: stairs, apples, coins in a purse.
- Involve your child with money, cooking and measuring in everyday life.
- Talk about time and use a clock with hands, not just digital.
- Avoid saying "I was never good at maths either"; keep it positive.
- Praise effort and good thinking, not just right answers.

Getting an assessment

Dyscalculia is not diagnosed by a GP. Start with your child's class teacher or SENCo. An assessment is carried out by a specialist assessor or educational psychologist. **Your child does not need a diagnosis to receive SEN support at school;** support should be based on need.

Where to find out more

British Dyslexia Association (also covers dyscalculia): bdadyslexia.org.uk

Dyscalculia Network: dyscalculianetwork.com

National Numeracy: nationalnumeracy.org.uk

SENDIASS: free, impartial advice on SEN support in school. Search "SENDIASS" with Gloucestershire or Herefordshire.

About Nicola

Nicola has worked in primary schools since 2003 and has been a Higher Level Teaching Assistant since 2008, specialising in special educational needs, including running nurture groups.