

Understanding Dyscalculia

A Guide for Parents of Elementary Students

What is Dyscalculia?

Dyscalculia is a learning disability that affects a person's ability to understand numbers and learn math facts. It is neurological in origin — meaning it is related to how the brain processes numerical information — not a result of poor teaching, lack of effort, or low intelligence. Children with dyscalculia are often just as intelligent as their peers; they simply have a brain-based difference in how they process quantity and number relationships.

Dyscalculia is as common as dyslexia, affecting an estimated 5–8% of school-age children. Importantly, dyslexia and dyscalculia co-occur in approximately 40–50% of cases — so if your child has dyslexia, it is worth asking about math too.

Signs of Dyscalculia in Elementary Students

Dyscalculia looks different at different ages. Here are common signs by grade band:

Grades K–1	Grades 2–3
• Difficulty counting objects reliably • Can't easily tell which group has more • Counts on fingers much longer than peers • Trouble learning number names or symbols • Struggles with simple puzzles and patterns	• Still counts on fingers for simple addition • Can't memorize math facts despite practice • Confuses operation signs (+, −, ×) • Makes errors placing digits (mixes up tens/ones) • Difficulty telling time on an analog clock
Grades 3–4	Grade 5
• Slow, inaccurate math fact recall even with drill • Difficulty with multi-step problems • Struggles with fractions and decimals • Loses track of steps in computation	• Cannot reliably estimate or reason about number size • Difficulty with money, measurement, elapsed time

- Anxiety around math tests and timed activities

- Word problems feel impossible even with read-aloud
- Avoids math; significant emotional response
- Large gap between verbal ability and math performance

Dyscalculia is NOT...

- A result of not trying hard enough
- Caused by missing too much school
- Something a child will “grow out of” without support
- The same as math anxiety (though anxiety often develops because of dyscalculia)
- A sign of low intelligence

What Good Instruction Looks Like

Students with dyscalculia need the same kind of explicit, structured, multisensory instruction that students with dyslexia need for reading — but applied to math. This is called structured mathematics instruction.

CRA: The Gold Standard Framework

Effective math instruction for students with dyscalculia follows the Concrete-Representational-Abstract (CRA) sequence:

- Concrete: Students use physical objects (blocks, counters, fraction tiles) to build understanding
- Representational: Students draw pictures or diagrams to represent the concept
- Abstract: Students work with numbers and symbols only after understanding is built through C and R

If your child’s teacher is going straight to abstract math (numbers on paper) without using manipulatives and visual representations, that is a concern worth raising.

Your Rights as a Parent

Under federal law (IDEA), your child has the right to:

- A free, comprehensive evaluation for suspected learning disabilities — including in mathematics

- An IEP that addresses all areas of disability, not just reading
- Specially Designed Instruction (SDI) using research-based methods
- Appropriate accommodations that remove barriers caused by the disability
- Prior Written Notice if the school refuses to evaluate or change the IEP

Questions to Ask at Your Child's IEP Meeting

- Has my child been evaluated for a specific learning disability in mathematics, not just reading?
- What evidence-based program is being used for math intervention?
- What training does the teacher delivering math intervention have?
- What accommodations is my child receiving specifically for math?
- Can I see the progress monitoring data showing whether the math intervention is working?

Resources for Families

- Understood.org — dyscalculia section: excellent parent-friendly explanations
- Yale Center for Dyslexia & Creativity — resources on co-occurring learning differences
- WYO Right to Read (wyorighttoread.org) — Wyoming-specific advocacy and resources
- Dyscalculia.org — research summaries and screening tools