

Dyscalculia

Research suggests that dyscalculia can be experienced as part of a dyslexic pattern or be associated with other learning difficulties, but can also exist separately.

**The term “Dyscalculia” is an ‘umbrella term’
(a term within or under which a range of difficulties
relating to the understanding and use of numbers can be combined)**

People with dyscalculia may experience the following difficulties:-

- Sorting objects by shape, size or colour.
- Learning times tables.
- Matching numbers with corresponding amounts.
- Basic number sense (learning the meaning of numbers) and learning to count.
- Recognising groups and patterns, and comparing and contrasting with concepts like smaller / bigger or taller / shorter.
- Recognising numbers and following mathematical notation and symbols.
- Money calculations, telling the time, and concepts such as speed (miles per hour) or temperature.
- Orientation (left, right, up and down) and therefore find maths activities relating to spatial factors tricky.
- Where dyscalculia is linked to dyslexia, students will have difficulty reading written questions. Where dyscalculia is *not* related to dyslexia, they may find learning and recalling number facts difficult, and struggle to learn maths methods.
- As children progress through school, they may have ongoing difficulty solving basic maths problems using addition, subtraction, multiplication and division, and have trouble applying their knowledge and skills to solve maths problems.
- Weak visuo-spatial skills can cause difficulty in putting down answers on paper in an organised way.
- Understanding what is written on a board can be challenging.
- Teenagers & adults may have difficulty moving on to more advanced mathematics.
- Working memory difficulties are very often a factor in dyscalculia. This means students may have difficulty holding information and manipulating it. Students of any age can find that relatively weak working memory skills can inhibit mental arithmetic and calculation.





Some simple ideas to try

- ✓ Try singing or chanting times tables, to embed them.
- ✓ Keeping score when playing games helps to strengthen calculation skills.
- ✓ Use kinesthetic maths materials to introduce and embed mathematical concepts.
- ✓ Use supportive visual materials like Number Squares.
- ✓ With young children, practice working memory skills by playing games like 'I went to the shop and I bought...' to practice the skills of remembering and manipulating aural information. Or practice calculating simple sums mentally, for example, in the car. With older children and teenagers, playing card games and strategy games like chess may be helpful, as you need to keep track of what cards have been laid, and keep different strategies in mind for chess.
- ✓ *Always, make maths homework as much fun as possible! Aim to increase confidence and reduce anxiety, by building in opportunities to experience success.*
- ✓ *Where difficulties persist and cause a high level of concern, consider exploring the pattern of difficulty with a PsychEd Educational Psychologist.*

Our assessments address all the areas and concerns highlighted in this leaflet.

