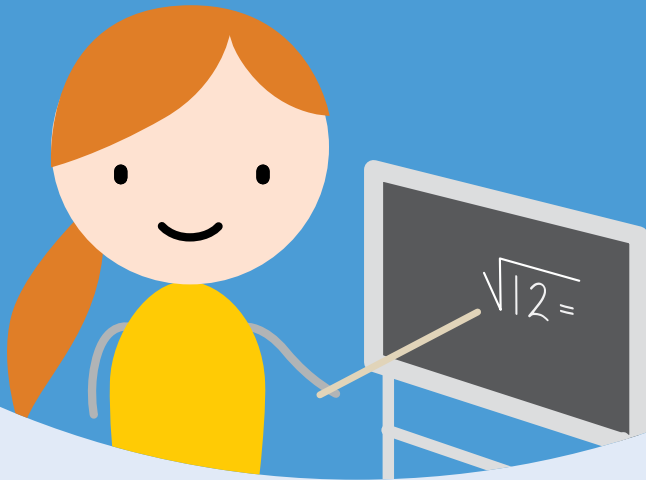


# Numeracy and epilepsy



The impact of epilepsy is variable – some students are greatly affected while others are not.

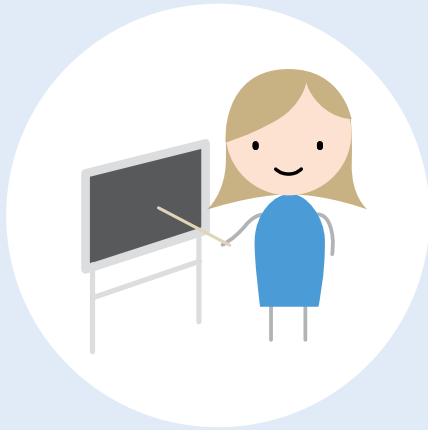
**Solid reasoning and thinking underpins numeracy and is demonstrated by manipulation of abstract symbols to gain a solution to a specific problem. Underlying the ability to manipulate abstract symbols are basic concepts and competencies. Some students with epilepsy may not have fully developed these required concepts and competencies.**

## Possible causes of numeracy difficulties

- Difficulties in grasping the language of numeracy. (*Refer related fact sheet on language*)
- Visual or auditory processing difficulties. (*Refer related fact sheets*)
- Difficulties grasping key features of a concept and/or transferring concepts to other contexts.
- Temporary lack of ability or confusion due to seizures and/or medication and/or frequent medical related absences.
- Lessened performance due to underlying neurological problems.

## Possible indicators of numeracy difficulties

- Confuses operational signs.
- Finds it difficult to recall number facts.
- Finds it difficult to grasp abstract math concepts.
- Has difficulty recalling and applying appropriate math procedures.
- Has difficulty discriminating between relevant and irrelevant data to solve math problems.



### How teachers can help

- Modify numeracy activities to the student's level to ensure understanding and confidence building.
- Assist student to read and interpret mathematical language and teach problem solving strategies.
- Encourage the student to talk about mathematical ideas, to verbalise symbolic statements. Language and concept formation go hand in hand.
- Frequently review and practise new skills and concepts introduced.
- Provide opportunities for the student to explain their new learning to a peer, or adult.



### Strategies to try

- Real life and purposeful learning activities are the most effective teaching tool to develop numeracy skills, e.g. cooking.
- Concrete activities are essential to establish concepts and allow learning to progress.
- Allow opportunities for the student to practise repetition of number facts such as table facts and automatic response through class and computer games.
- When introducing a new concept, use as many representations of the concept as you can: use manipulatives and models, real-life examples, technology and symbolic representations.
- Once concepts are established, calculators can be a very helpful tool to assist the student.

This fact sheet is part of a suite of resources that are targeted to both parents and teachers to assist students with epilepsy in the primary, secondary and special school settings.

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The information contained in this publication provides general information about epilepsy. It does not provide specific advice. Specific health and medical advice should always be obtained from a qualified health professional.

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The Epilepsy Smart Schools Practical Guide and supporting resources provides information on how a school can embed inclusive, safe and educationally sound practices for students with epilepsy and in so doing become 'epilepsy smart'. The guide and supporting resources which can be accessed via [www.epilepsysmartschools.org.au](http://www.epilepsysmartschools.org.au)