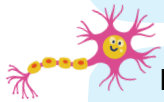


# A BRILLIANT ME IN ACTION ONE PAGE GUIDE TO...

## NEUROPLASTICITY: THE BRAIN'S AMAZING ABILITY TO CHANGE

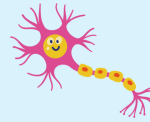


**Neuroplasticity** refers to the brain's incredible ability to change, adapt, and reorganise itself throughout life. When we learn something new, practise a skill, or have new experiences, the brain strengthens or creates new neural connections.

### WHAT?

Neuroplasticity occurs when children:

- learn new knowledge or skills
- practise something repeatedly
- solve problems
- experience emotions or relationships
- recover from difficulties or injury



This means that repeated experiences strengthen neural pathways, making behaviours, thoughts, or skills easier over time.

### WHY?

- Teaching children about neuroplasticity—the brain's ability to change and adapt—can foster a growth mindset, enhancing motivation and resilience. It can help pupils believe that their intelligence and abilities can grow and develop. (*'growth mindset'*).
- Research has found that teaching children about neuroplasticity positively affected their motivation, academic achievement, and brain activity. The effects were particularly significant for at-risk students.

Neuroplasticity does not only apply to academic learning.

When children repeatedly practise regulation strategies (such as breathing, movement, or calming routines), the brain strengthens the neural circuits involved in:

### SEL?

- prefrontal cortex regulation
- attention control
- calming the stress response

Contributing to **self-awareness**, **self-management** and **responsible decision-making** core competencies.

### FIND OUT MORE

- [The Oxford Brain Story - for families](#) (short animations about how experiences shape our brains)
- [The SEEN \(Secondary Education around Early Neurodevelopment\) Programme \(KS2 Pack\)](#)
- **Books**
  - Deak, JoAnn. ***Your Fantastic Elastic Brain: Stretch It, Shape It***. With Sarah Ackerley, 1st ed, Sourcebooks, Incorporated, 2010.
  - Dweck, Carol. ***Mindset - Updated Edition: Changing the Way You Think to Fulfil Your Potential***. Robinson, 2017.

