



# How the brain grows stronger when it learns

Every time your child learns something new, their brain forms new connections.



Did you know the brain grows stronger when you exercise it? In the same way your body's muscles get stronger when you exercise them, our brains grow when we learn. For those kids who think they're not smart, knowing they can make their brain stronger through learning can be a game-changer.

## How learning helps the brain grow

Every time your child learns something new, their brain forms new connections which can make their brain stronger. Here's how it works:

- There are billions of tiny nerve cells called neurons in the brain.
- These nerve cells have branches connecting them to other cells.

- Communication between brain cells allows us to think and solve problems.
- When we learn new things, the connections in the brain multiply and get stronger.

## Your child can grow their brain

Encourage your child to see their brain as a muscle that grows stronger and smarter when it learns. Talk to them about how their brain is constantly developing and that no matter how hard they might find school, every time they make an effort to learn, they are developing their brain. Research from Stanford University has found that young people who believe their intellectual abilities are not fixed but can be developed, are more likely to improve their performance at school because they can see that their success is something they have some control over.

## We are born to learn

Everyone can learn. And the more a person learns, the easier it gets to learn new things. This insight can be really valuable for kids who might otherwise think they can't do something or feel that a particular subject is too hard. Encourage your child to stick at their learning by reminding them that the more they learn, the easier learning will become.

## It's more about effort than IQ

When your child is learning and feels frustrated, it's normal. It can take time to 'get' things. Scientists have found that the brain grows more when we learn something new and less when we practise things we already know. So it's natural that learning something new might feel challenging. Reassure your child that their frustration is what happens when their brain is working hard. Encourage them to stick at it. Research has found that the key characteristic of success is not IQ or talent but grit – sticking at things even when they are hard.

## Their spark can help

If your child is learning something new and finding it a little challenging, remember to nurture their spark. Their spark is that thing they feel passionate about, that gives them joy and meaning, so spending time on their spark will help build their confidence so they can tackle those things they find harder to learn.

# Don't leave learning to the last minute!

Spreading out learning gives the links between the brain's neurons time to grow. It's this little-by-little accumulation of knowledge that can lead to an 'aha!' moment but you have to give it time. So encourage our child to avoid leaving learning for a test until the last minute. Explain to them that their brain needs some time to grow and make connections.

## It takes time

Changes to the brain's structure are gradual so if your child wants to learn something new, they'll need to practise consistently over time. The more they practise, the stronger the connections in their brain will become. Talk to them about something they are good at – their spark. Maybe it's throwing a ball through a hoop, skateboarding, or playing the piano. Whatever it is, encourage them to reflect on how much they have practised to get to where they are now. Tell them about what other people have achieved through practice, and how hard top achievers work to get there, be they Olympians, footy stars, scientists or musicians. And tell them that this same process of practising consistently over time will work whether they are learning how to skateboard, read or do maths. Learning to stick at things is one of the hardest things to learn and is a key ingredient for success in life.

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