Every person carries around with them a grey, winitly, yet complex mass of matter that controls every single thing that they will ever do. It allows them to think, learn, create, and experience emotions. It also controls every blink, breath, smile, tear and heartbeat. This incredible mechanism is simply called the brain, and is so amazing that even the world’s greatest scientists have described it to be the most complex thing they have yet discovered in our universe.

**a child’s brain**

A child is born with 100 billion brain cells (166 times the number of people on the planet) and 50 trillion connections. During the first few months of life, the number of connections multiply by 20. Each brain cell can connect with as many as 16,000 other brain cells. A 2-year-old child has twice as many connections as an adult and if they are not used, they wither away. By the time a child turns 5, 90% of the brain connections will be formed. There will never be a time in children’s lives when the experiences and opportunities they have will be of greater importance than the early childhood years.

Your child has an amazing brain!

**early brain development**

Early childhood experiences impact and determine how the brain develops. Early sensory experiences create new connections between brain cells, and repetition of these experiences strengthen them. The number of brain cell connections increase or decrease, depending on the environment and the experiences that a child is exposed to. Children continue to learn throughout life, but they do not conquer new skills or recover from stumbling blocks as quickly and easily as in their early years. It is therefore important to provide children with the best opportunities for learning and growth during the early years when their minds are most prepared to absorb new information.

**how to stimulate children’s brain development**

Children need to be exposed to a continuous stream of new information and experiences that are challenging and allow them to extend their thinking and understanding. They should experience a variety of approaches to learning, as well as opportunities to interact with different types of learning media.

**play**

Play is not only fun, it is the fundamental way that children learn. Use games, toys and educational resources that children can relate to in their natural environment. Children will engage in play for much longer with resources that are from within their natural environment.

**talk**

In order to get brain cells moving, start talking. Young children absorb every word. The more you share, the more they learn. What you say is not as important as how you say it and the tone and expression you use. Young children need to hear full sentences in order for their vocabularies to grow. Assist your children by using words to help them better understand the world around them, including words that help to describe feelings, objects, and everyday things. Instead of saying, “Look at the helicopter”, say, “Look at the big red and white helicopter flying up high in the clear, blue sky.” Try to answer all of your child’s questions. If you cannot, the value of finding the answer together using books or the internet is immeasurable.

**read**

Reading or looking through books with your child is essential, but asking questions and creating discussions around what you read or the pictures seen is a great way of extending your child’s learning and thinking. Should you read to newborns and infants? Absolutely, a child is never too young (or too old) to be read to.

**music**

Music engages all areas of the brain and stimulates numerous elements of brain function. Children should experience many different kinds of music, especially rhythm, rhyme, and repetition in music and songs.

**art**

Art engages a range of the brain’s areas that help extend children’s sensory, cognitive, emotional and physical learning. Children should receive many opportunities to draw, paint, build, craft and create using different types of media.

**movement/exercise**

Exercise that causes the heart to beat faster is beneficial for children’s physical development and helps to improve their mood. Scientists have recently discovered that, for a period of time after exercise has taken place, the body produces a chemical that allows the brain to be more receptive to learning. Physical activity and movement stimulates brain growth and helps essential brain connections for learning to take place. Regular exercise and participation in a variety of physical activities are vital for healthy brain development in children.

**love**

Supportive, loving relationships are food for healthy brain growth in children. Children learn about caring relationships and how to handle stress from you, so if you are stressed, your child will be too. Your child needs you to love them, comfort them, and encourage them. The connections between brain cells in a child’s brain are continually developing. Recent research has discovered that 30% to 60% of the brain’s development depends on heredity, while 40% to 70% of development is based on interactions with the environment, including relationships with others.

**nutrition**

Ensure that your child eats foods that stimulate brain function and growth, these include green vegetables, nuts, fish, fresh fruits, lean meats and dairy products. The daily intake of vitamin and mineral supplements could also be beneficial, particularly for fussy eaters. Encourage your children to drink plenty of water throughout the day, as it helps children to concentrate, as well as maintain their energy levels.

**sleep**

While children are asleep, their brains are actively processing the day’s information. During this process, the child’s memory is strengthened, and new skills and tasks are reinforced. It is therefore essential that children get enough sleep, and the recommended amount of sleep for young children is nine to ten hours per day.

The development of a child’s brain holds the key to the child’s future. The early years have an everlasting effect on the development of young children’s brains; however, these early years also go by very quickly. Play, talk, read, sing, laugh, dance, create and have fun with your children. Encourage healthy eating and enough sleep, but most importantly, show your children how much you love them, in as many ways as possible. By helping your child’s brain to develop, you are nourishing your child’s lifetime potential.

*Emma runs a company called Mighty Minds. She has a Masters in Educational Psychology, a Graduate Diploma in Teaching and has completed advanced courses in Play Therapy. www.mightyminds.co.nz*