

Neuroscience

As we gather today, please show reflection and self discipline as we consider our emotions.

In a moment of quietness read the poem and think about how it applies to you and your experiences.

Our theme today is trying to understand our brain, taking responsibility for our actions and words and the complex process of how we make decisions.

Mixed Emotions

Did you ever... Bang your head on the wall Or Curl up in to a ball Cry until tomorrow Because of all the sorrow Or Go insane From all the pain Could it feel any worse? In all the universe

Did you ever... Laugh until you cried Or felt warm and fuzzy inside Sing in the shower Or yell I love you from the Eiffel tower All because it felt good Skip cause you could Or put your arms out and around you twirled Could things be any better in the entire world

Donna Secrest

What is neuroscience?

Neuroscience is the science of the brain and nervous system. Our brains are super complicated.

Neuroscientists study how brain cells signal to each other, how brain cells connect to each other, and they study whole systems of brain cells at work, for example the thinking areas of the brain.

Neuroscientists also study how the brain evolved, how cells in the developing brain are different and how areas of the brain are responsible for different jobs.





When a baby is conceived, they comprise just a few cells, but by the time the baby is born, there are over 100 billion cells in the brain alone. Even a new-born baby has more computing power than the most powerful supercomputer. Not only do they have 100 billion brain cells, but babies are estimated to grow another million brain cells every minute. This means that there are trillions of potential connections, offering enormous learning potential.



Neuroscientists try to understand how we look, touch, smell, taste and listen to the world around us enabling us to create an encyclopedia of everything we experience and store it in our brains.

The more we know about our own brains, what they do and how we can control them the better we can use and understand them.

Part of our brain is responsible for the 4 Fs; fight, flight, flock and freeze. Q-Do you know what these are, and can you give an example of each in real life?

They are connected to our survival techniques and when we feel threatened. Our brain will give us options about danger, hide from it, run away from it or confront it.

Flip my lid

- <u>https://youtu.be/2xeDcPBD5Fk</u>
- 2 mins



USING YOUR KPSTAIRS BRAIN TO GENTLY HUG BIG FEELINGS

If we want to understand how our brains react or respond in moments of high pressure, we need to understand how our brain works.

Why do we make bad impulsive decisions, why do we feel stress, why do we feel angry or why are we nervous/anxious?

Different parts of our brain give us suggestions about how to act and what to do, it is like a big game of tug of war.





Professor Steve Peters has worked with many businesses, leaders and sports people helping them achieve world class success. He also wrote a famous book called The Chip Paradox.

Watch the video to understand what your chimp brain is all about, how you can live with yours and how you can 'train' it.

- <u>https://youtu.be/jUl8-NERBbg</u>
- 6 mins



Emotions as we are growing up or when we are in difficult situations can be confusing or harmful.

Think of a situation when you have been stressed, angry, sad or worried- an argument, exam, different point of view than another person, when an adult has said 'No' or when you must accept a consequence.

Why we lose control of our emotions

- <u>https://youtu.be/3bKuoH8CkFc</u>
- 6.50 mins









t not you, who?

After all the information you have learnt about your brain think about the choices you make everyday.

What you say and do is your responsibly so make sure you own your actions, and your actions are helpful and positive.

I am responsible for me

- <u>https://youtu.be/SFvZtDqFYU4</u>
- 2.15 mins



Because of our inner chimp and brain battle we all make mistakes, but it is important to own up when we do.

Blaming others or not acknowledging poor choices/actions means that you will repeat these but most importantly others will quickly grow to not trust you.

The Blame Game is one to stay away from.

- The Blame Game
- <u>https://youtu.be/yQjtDxq50fk</u>
- 2.40 mins



Take a little time to reflect with someone near you.

What are the 5 main things you have learnt, and you will take away from this presentation. How will they help you understand your brain more?