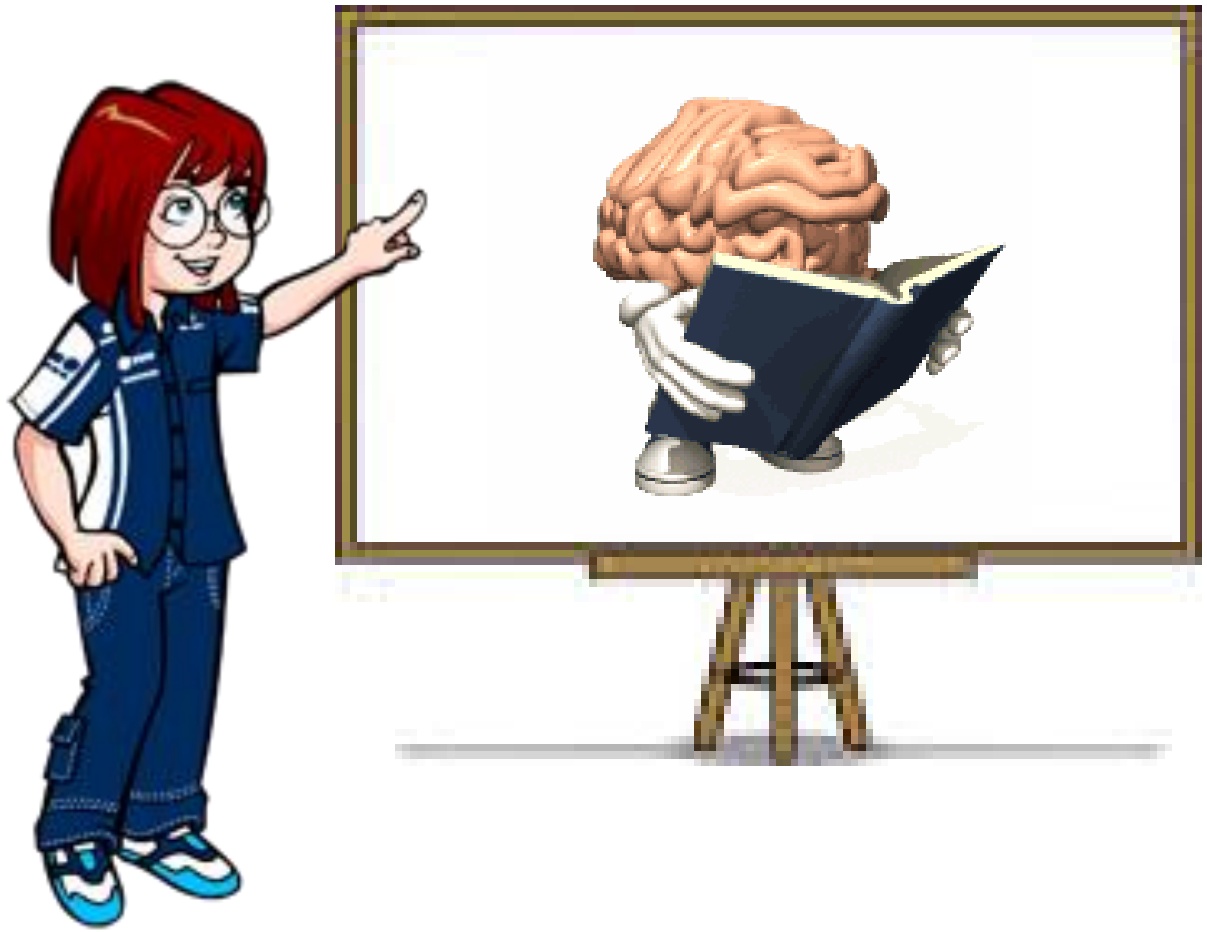
Stroke & Brain

Education Workbook



Why Education?

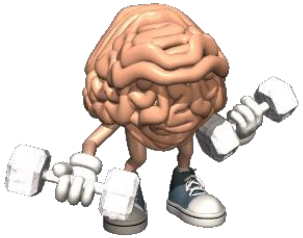
- To learn more about how the brain works and the effects of a stroke





- To help you understand what difficulties you have since your stroke

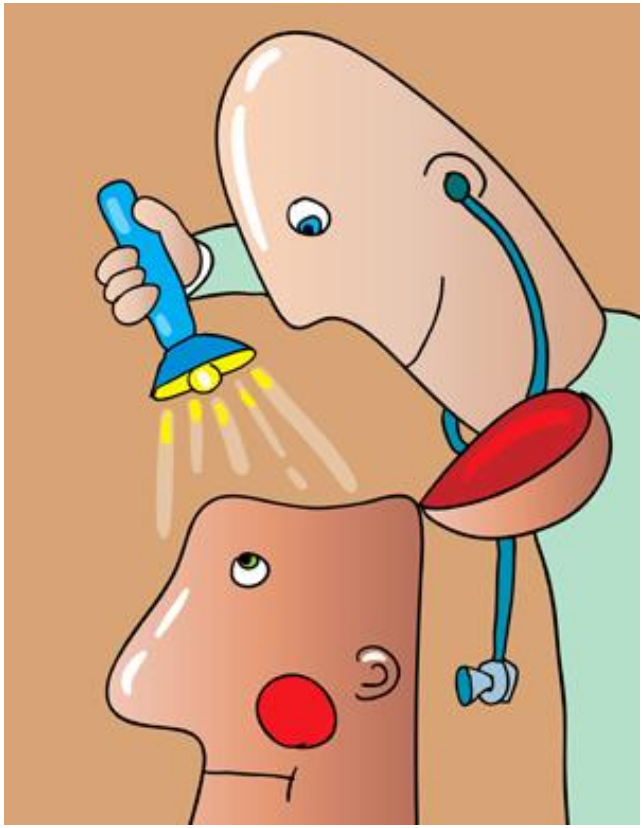
- To learn about the purpose of rehabilitation





- To learn what you can do to help yourself

What does the brain look like?



The brain can be described as…



- Having folded layers



- Weighing about 3lbs

- Being bathed in fluid and ‘floating’ inside the skull



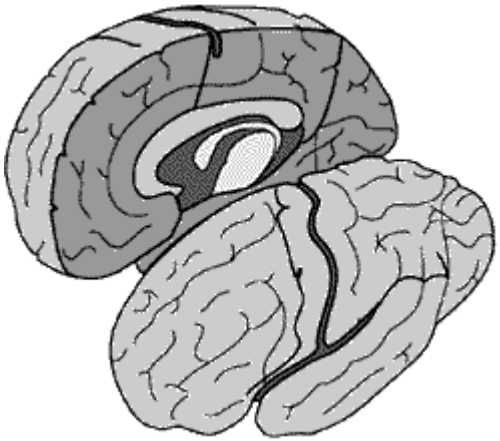
- Being protected by the bony skull

How does the brain work?



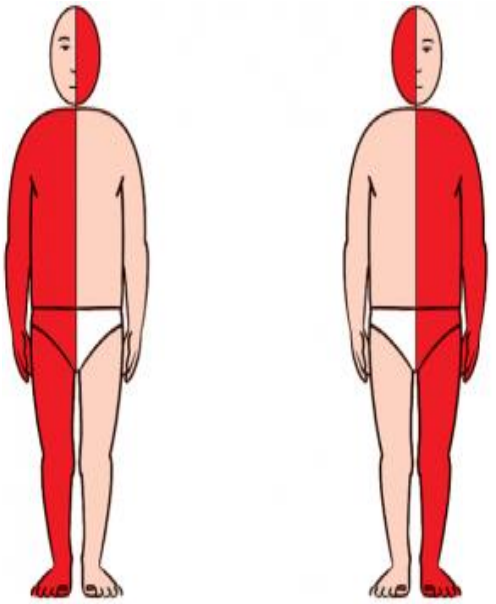
The brain works…

• The brain has a cortex which is the thinking part of the brain (it is wrinkly and composed of grey matter).



• The brain is divided into two hemispheres – left and right.

• The left side of the brain controls the right side of the body, and vice versa.



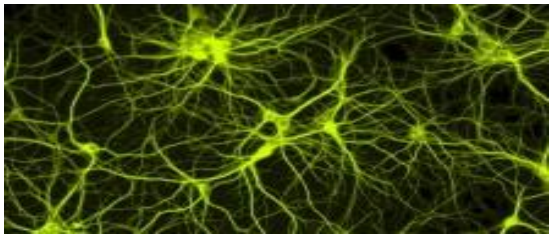
•Sometimes, people do not have difficulties which visibly affect the left or right sided of the body

The brain works…

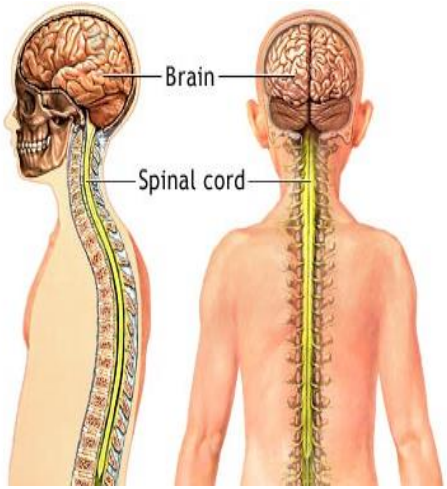
• The brain is able to carry messages between its different parts via cells called neurons.



•There are billions of neurons which form complex pathways and networks, which transport the messages within the brain.



• The brain is also able to carry messages backwards and forwards to the body via the brain stem and spinal cord.



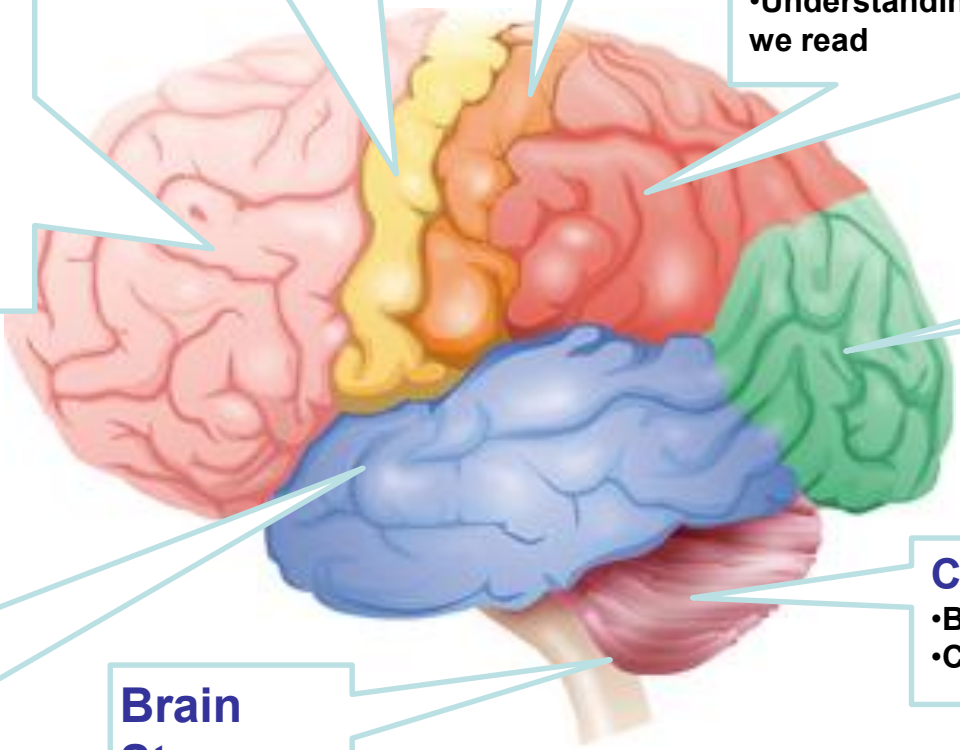
Different parts of the brain and what functions they perform…

Frontal Lobe
- Attention & Concentration
- Executive Functioning
  - Planning
  - Problem solving
  - Organisation
- Personality
- Emotions
- Behaviour
- Thinking of what to say
- Moving the mouth to speak
- Insight & Awareness

Sensory Strip
- Sensations

Motor Strip
- Movements

Parietal Lobe
- Making sense of the world around you
- Recognising what things are
- Recognising where things are
- Planning movements (like reaching)
- Understanding what we hear and what we read



Occipital Lobe
- Vision

Temporal Lobe
- Memory & Learning
- Hearing
- Making sense and understanding what we see and hear

Brain Stem

Cerebellum
- Balance
- Coordination

Working together…

Different parts of the brain are responsible for different skills and functions that we carry out.

As the brain is very complex, it is important to remember that in order to perform efficiently, more than one area of the brain is involved at any one time.

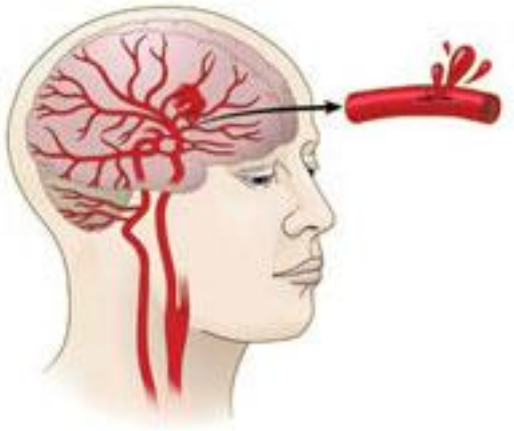


This means that all parts of the brain need to work effectively TOGETHER.

Stroke

Like all organs, the brain needs the oxygen and nutrients transported by blood to function properly. If the supply of blood is restricted or stopped, brain cells begin to die.





There are two main causes of strokes:

Ischaemic – where the blood supply is stopped due to a blood clot.

Haemorrhagic – where a weakened blood vessel leaks.

Which skills & functions were affected by your stroke?



Strength



Walking



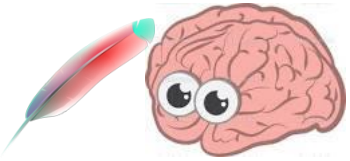
Balance



Stamina



Fatigue



Sensation



Thinking Skills



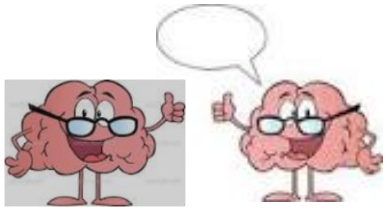
Vision



Memory



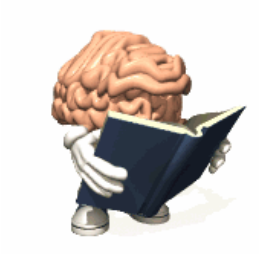
Swallowing



Communicating



Voice



Reading



Writing



Facial Weakness



Emotions



Mood



Social Skills



Sleeping



Relaxing



Relationships



Leisure



Accessing Community



Study



Work



Driving



Holidays

Why is rehabilitation important?

NEUROPLASTICITY

After a stroke, damaged areas in the brain cannot re-heal themselves!

Over time however, the brain is able to form new pathways in attempt to regain the skills and functions affected by the stroke!

