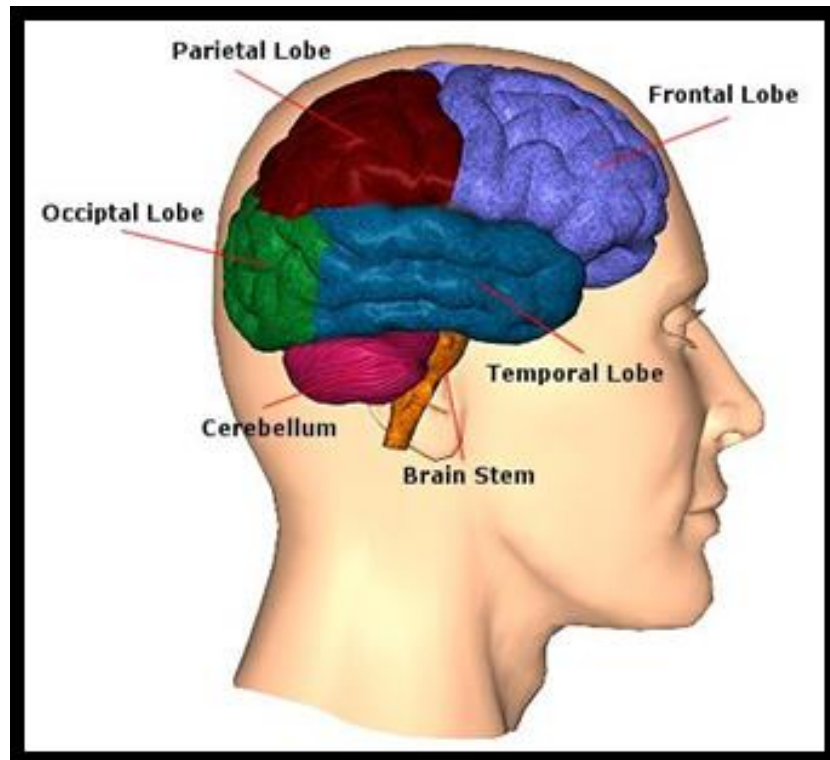


Fact sheet

Brain map and functions

This is a basic map of the brain*:



*Reproduced with kind permission from the [Centre for Neuro Skills](#).

Frontal lobes

Function:	Observed dysfunction:
<ul style="list-style-type: none">> conscious thought> concentration> perseverance> judgement> attention span> impulse control - self monitoring and supervision> problem solving> organisation> critical thinking> forward thinking> ability to feel and express emotion> empathy> memory for habits and motor activities.	<ul style="list-style-type: none">> paralysis> difficulty in sequencing (inability to plan a sequence of complex movements need to complete multi-stepped tasks)> loss of spontaneity in interacting with others> loss of flexibility in thinking> perseveration (persistence of a single thought)> difficulty attending (inability to focus on task)> emotionally labile (mood changes).

Visit [Queensland Government, Health, Brain Map Frontal Lobes](#) for more information.



Parietal lobes

Function:	Observed dysfunction:
<ul style="list-style-type: none">> visual attention> touch perception> monitors sensation and body position> control reading> face recognition> understanding time> goal directed voluntary movements> manipulation of objects	<ul style="list-style-type: none">> inability to attend to more than one object at a time> anomia (inability to name an object)> agraphia (inability to locate the words for writing)> alexia (reading difficulties)> difficulty drawing> difficulty in distinguishing left from right> dyscalculia (difficulty with mathematics)> apraxia (lack of awareness of certain body parts and/or surrounding space)> inability to focus visual attention> difficulties with hand-eye coordination.

Visit [Queensland Government, Health, Brain Map: Parietal Lobes](#) for more information.

Occipital lobes

Function:	Observed dysfunction:
<ul style="list-style-type: none">> receives visual information> interprets colour, shape, distance.	<ul style="list-style-type: none">> visual field deficits> difficulty locating objects> colour agnosia (difficulty identifying colour)> production of hallucinations> visual illusions> inability to recognise words (word blindness)> difficulty recognising drawn objects> movement agnosia (inability to recognise movement of an object)> difficulty reading and writing

Visit [Queensland Government, Health, Brain Map: Occipital Lobes](#) for more information.

Temporal lobes

Function:	Observed dysfunction:
<ul style="list-style-type: none">> memory and new learning> receives auditory messages> understands spoken language and rhythm> controls how things are ordered and categorised> some visual perception	<ul style="list-style-type: none">> prosopagnosia (difficulty in recognising faces)> Wernicke's aphasia (difficulty in understanding spoken words)> disturbance with selective attention to what is seen and heard> difficulty with identification of and verbalisation of objects> short-term memory loss> interference with long term memory> increased or decreased interest in sexual behaviour> inability to categorise objects> persistent talking (right lobe damage)> increased aggressive behaviour

Visit [Queensland Government, Health, Brain Map: Temporal](#) for more information.

Brain stem

Function:	Observed dysfunction:
<ul style="list-style-type: none">> breathing> heart rate> swallowing> startle response (reflexes to seeing and hearing)> autonomic nervous system (sweating, blood pressure, digestion, temperature)> affects level of alertness> ability to sleep> vestibular function (sense of balance).	<ul style="list-style-type: none">> decreased vital capacity> dysphagia (swallowing)> difficulty with balance and movement> vertigo (dizziness and nausea)> insomnia, sleep apnoea (sleeping difficulties).

Visit [Queensland Government, Health, Brain Map: Brain Stem](#) for more information.

Cerebellum

Function:	Observed dysfunction:
<ul style="list-style-type: none">> coordination> balance and equilibrium	<ul style="list-style-type: none">> asynergia (loss of coordination of motor movements)> dysmetria (inability to judge distance and when to stop)> adiadochokinesia (inability to perform rapid alternating movements)> intention tremor> abnormal/ataxic gait (staggering wide based walking)> tendency to fall> hypotonia (weak muscles)> dysphonia (slurred speech)> nystagmus (abnormal eye movements)> loss of ability to coordinate fine movements

Visit [Queensland Government, Health, Brain Map: Cerebellum](#) for more information.

For more information

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Resources accurate as at 3 February 2009. If you have any questions or wish to update the information, please contact [Dr Maggie Killington](#)

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