BRAIN

Neurons (Nerve cells)

- The brain is made up of neurones
- neurones carry electrical messages around the body
- they help you think move feel and react

Brain +Spinal cord= central nervous system (CNS)

- CNS includes brain and spinal cord

What does CNS do

- CNS receive Information from the body
- decides what to do
- send messages to muscles and organs
- CNS controls the whole body
- When you touch something hot CNS tells your hand to move away

How does the CNS send the messages

- messages are carried by the neurones
- neuron scary the electrical signals very fast
- signals pass between neurones at synapsis

Main parts of the brain

Cerebral cortex (Top part of the brain)

- Biggest part of the brain

- it controls the thinking, memory, language, senses, behaviour, and conscious decisions
- It is the right side of the brain that controls the left side of the body

Cerebellum

- It is found at the back of the brain
- It controls the balance, posture, and coordination means smooth movement
- If damaged then there will be jerky movements, poor balance and shaky walking

Medulla Oblongata

- It is found at the base of the brain near the spinal cord
- It controls the heart rate, breathing, reflexes like sneezing and swelling
- It is very important for keeping you alive

Spinal cord

- It sent the messages between the brain and the rest of the body
- it help controlled reflex action

How Scientist study the brain

Radioactive glucose test PET scan idea

- A man is injected with radioactive glucose that is sugar
- active brain cells use more glucose
- radioactive parts give of gamma rays
- when he moves his knees the part of the brain that control movement becomes more active
- More active means it will use more glucose and more Gamma Rays from that area
- So doctors can see which part of the brain is working

CT scan or CAT scan

- CT Scan uses X rays to make pictures of the brain
- the X-ray machine moves around the head in a circle
- a computer build the picture into a series of slices of the brain like the slices of the bread
- CT Scan shows denser areas like bones or tumors better
- they help doctor find tumors, bleeding damage from injury