Brain functions are **localised**. Different brain areas carry out different functions.

**How do we know?**

Three methods for investigating the brain.

The brain is examined physically **after a person's death**. Features can be linked with what was known about them whilst alive.

**Post-mortem studies look at physical structure.**

Paul Broca found brain damage in a patient who was unable to speak.

**Three methods for investigating the brain.**

- **Post-mortem studies** look at physical structure.
- **An EEG** looks at electrical activity.
- **A PET scan** looks at glucose consumption.

**Broca's area:** speaking
- Motor cortex: movement
- Sensory cortex: sensation
- Visual cortex: vision
- Auditory cortex: hearing
- Wernicke's area: understanding language
- Wernicke's area 'lights up' when people listen to speech.

Broca's area: speaking

Paul Broca found brain damage in a patient who was unable to speak.

The brain is examined physically after a person's death. Features can be linked with what was known about them whilst alive.

Electrical activity from groups of neurons is recorded as a trace on paper.

When the retina is exposed to a flash of light, the EEG trace in the visual cortex changes in response.

More glucose is consumed in areas where the brain is more active. The scanner shows relative activity levels as different colours.

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