BIOLOGICAL PSYCHOLOGY 1: THE CENTRAL NERVOUS SYSTEM

BRAIN FUNCTIONS ARE **LOCALISED**. DIFFERENT BRAIN AREAS CARRY OUT DIFFERENT FUNCTIONS.

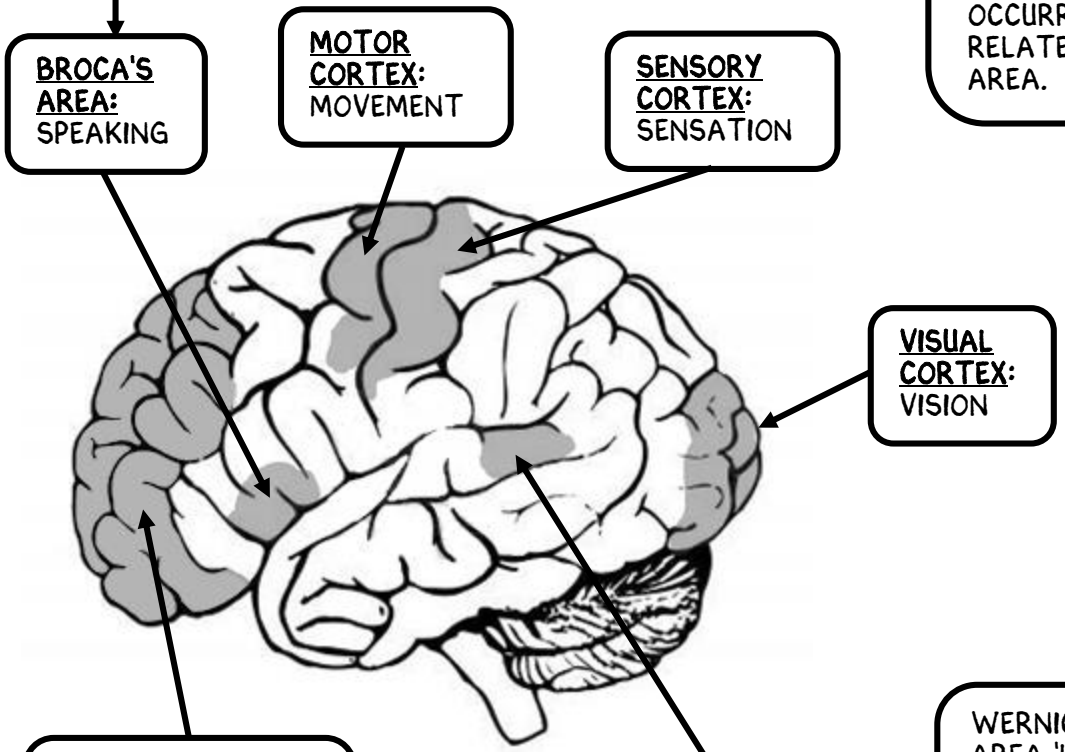
HOW DO WE KNOW?

THREE METHODS FOR INVESTIGATING THE BRAIN.

A **CAT/CT SCAN** USES X-RAYS TO BUILD UP A PICTURE OF **BRAIN STRUCTURE**

WHEN A PERSON LOSES THE ABILITY TO SPEAK, CAT/CT MIGHT SHOW THAT DAMAGE HAS OCCURRED IN A RELATED BRAIN AREA.

PET AND **FMRI** SCANS USE EITHER RADIOACTIVE GLUCOSE (PET) OR MAGNETIC FIELDS (FMRI) TO BUILD UP A PICTURE OF **BRAIN ACTIVITY**.

MORE OXYGEN/GLUCOSE GOES TO AREAS WHERE THE BRAIN IS MORE **ACTIVE**. THE SCANNER SHOWS RELATIVE ACTIVITY LEVELS AS **DIFFERENT COLOURS**.

WERNICKE'S AREA 'LIGHTS UP' WHEN PEOPLE **LISTEN TO SPEECH**.