

# **SPERRY (1968) HEMISPHERE DECONNECTION AND UNITY IN CONSCIOUS AWARENESS**

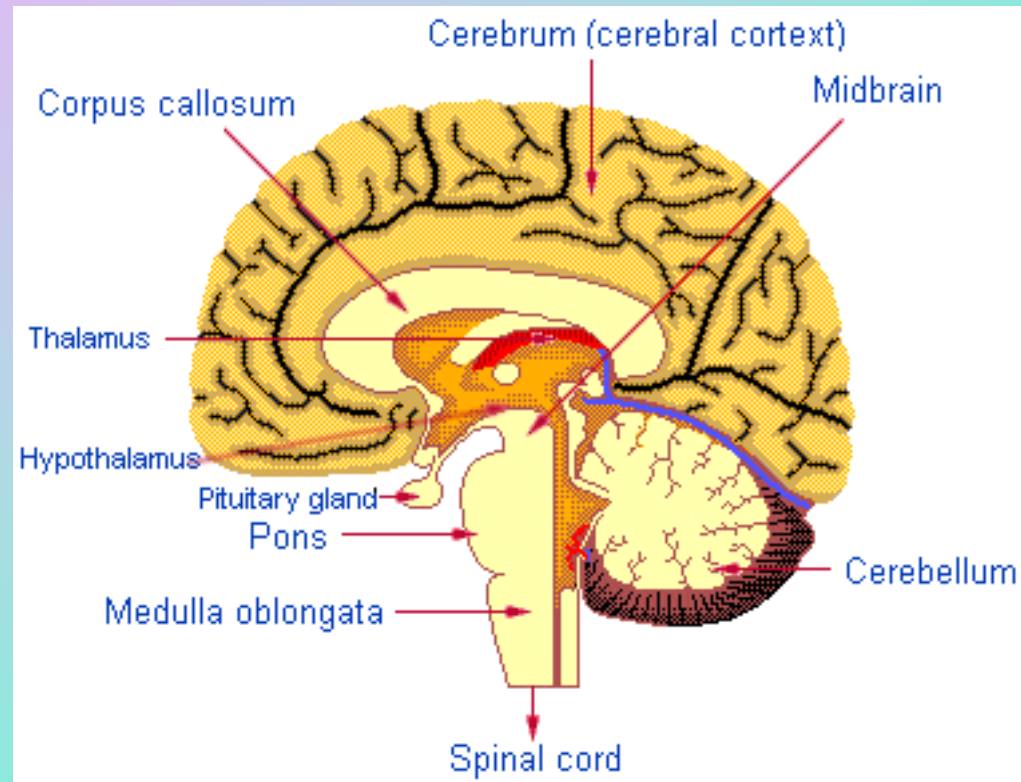
Areas to learn about:

- Structure of brain
- Localisation of function:  
cerebral hemispheres
- Research on hemisphere  
deconnection

# Structure of the brain:

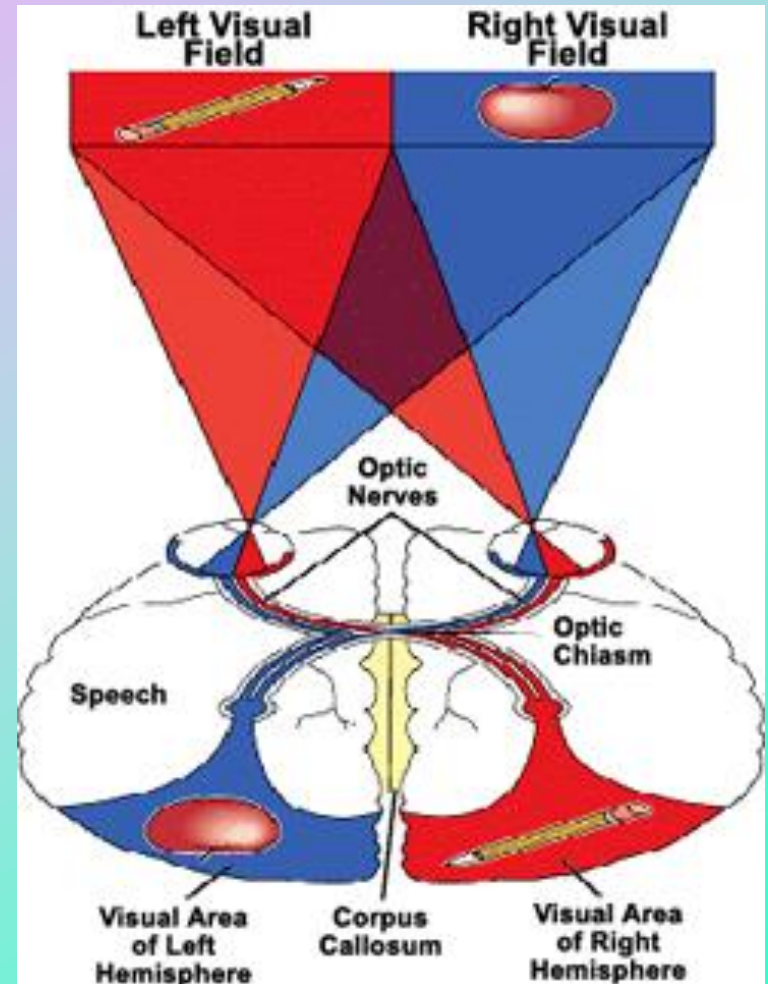
Check drawings on sheet carefully. You need to know the relevant terms;

- **Cerebral cortex**
- **Hemisphere**
- **Corpus callosum**



# Localisation of Function:

- Contralateral Control; Sense info and functions of one side of the body are received and controlled by hemisphere on opposite side of the brain.



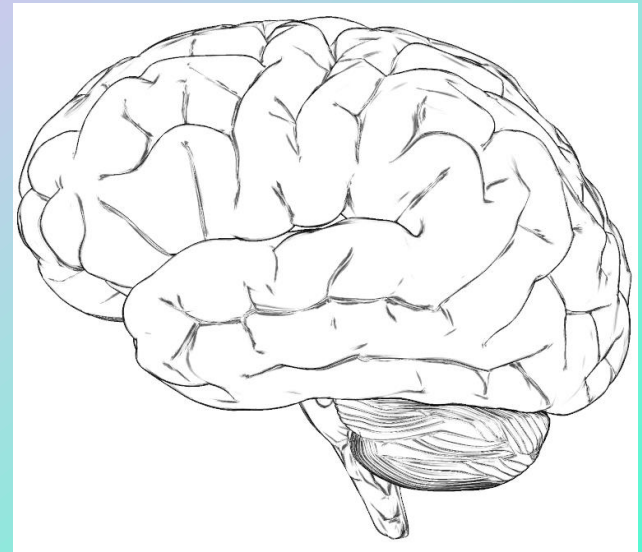
# HEMISPHERE FUNCTION

- Asymmetry of Function;  
differences in function between the right & left hemisphere;
- **Left:** dominant for language (speech, logical thought).



- **Right:** dominant for visuospatial tasks (drawing), holistic thought, creativity.

- **Evidence** for above; most comes from people who have suffered strokes (ruptured blood clot, depriving oxygen to area of brain) or people with brain tumours.



# Research; Hemisphere Deconnection

- Patients with severe epileptic seizures (caused by abnormal electrical discharges of groups of brain neurons)
  - Can make person unconscious, experience muscle spasms, & be harmful, debilitating ([Carlson](#), 1986).
  - Prevention; sever **corpus callosum** (reduces spread of neuronal activity)
  - Few side effects, but some tasks showed hemispheres acting independently. Forms basis for this study ([Sperry](#), 1968)

## Previous research:

- Sperry (1950s); animal research with cats & monkeys.
- Gazzaniga et al (1977); study with specialised contact lens.