

Neuroplasticity

It is the brain's ability to change and adapt due to experiences.

It is an umbrella term referring to the brain's ability to change and reorganise or grow neural networks.

- This can involve functional changes due to brain damage and structural changes due to learning.

Plasticity refers to the brain's ability to change, it does not mean that the brain is plastic.

Neuro means neurons, the nerve cells that are building blocks of the brain and nervous system. Thus neuroplasticity allows nerve cells to change and adjust.

Types

- functional neuroplasticity - the ability to move functions from a damaged area to undamaged areas of the brain.

- structural neuroplasticity - the brain's ability to actually change its physical structure as a result of learning.

- Benefits
 - ability to learn new things
 - ability to enhance existing cognitive capabilities
 - Recovery from strokes and traumatic brain injuries
 - Strengthening areas where function is lost or has declined
- Improvement can boost brain fitness