Spec ref: 4.5.2.1–3

KEY FACTS

- Synapse: gap between two neurones — signal crosses chemically
- Electrical impulse → neurotransmitters released from vesicles
- Neurotransmitters diffuse across cleft → bind to receptors → new impulse
- Signals only travel ONE WAY at synapses (receptors only on post-synaptic side)

★ Brain regions: cerebral cortex (thought), cerebellum (coordination), medulla (breathing/heart rate)

KEY TERMS

Synapse	Gap between neurones — signal carried by neurotransmitters
Neurotransmitter	Chemical crossing the synaptic cleft to trigger a new impulse
Cerebral cortex	Outer brain — conscious thought, memory, language, personality
Cerebellum	Brain region — coordination, balance, fine motor control

■ EXAM TIP: Within neurone = ELECTRICAL. Across synapse = CHEMICAL (neurotransmitter). Know both. Signals are one-directional at synapses.