BIOLOGICAL PSYCHOLOGY: THE STRUCTURE OF THE NERVOUS SYSTEM

THE **NERVOUS SYSTEM** IS A NETWORK OF SPECIALIST CELLS CAPABLE OF TRANSMITTING INFORMATION AROUND THE BODY.

HOW?

THE NERVOUS SYSTEM IS CHIEFLY MADE OF CELLS CALLED **NEURONS**. THEIR STRUCTURE AND FUNCTIONING ALLOWS THEM TO SEND AND RECEIVE MESSAGES.

CHEMICAL SIGNALS ARE SENT BETWEEN NEURONS AT STRUCTURES CALLED SYNAPSES, USING CHEMICALS CALLED **NEUROTRANSMITTERS**.

ELECTRICAL SIGNALS CALLED **ACTION POTENTIALS** CAN BE SENT FROM ONE END OF A NEURON TO THE OTHER.

WHY?

THE NERVOUS SYSTEM HELPS TO CO-ORDINATE THE ACTIVITY IN DIFFERENT SYSTEMS OF COMPLEX ORGANISMS LIKE US. IT ALLOWS US TO **DETECT** WHAT IS HAPPENING IN OUR ENVIRONMENT AND OUR OWN BODIES, BRING TOGETHER AND **PROCESS** INFORMATION, AND THEN **ACT** TO AFFECT WHAT HAPPENS NEXT.

THE NERVOUS SYSTEM IS ORGANISED INTO **DIVISIONS**, EACH WITH ITS OWN SPECIALISED FUNCTION

THE **CENTRAL NERVOUS SYSTEM** PROCESSES INFORMATION. IT CONSISTS OF THE BRAIN AND THE SPINAL CORD.

THE **PERIPHERAL NERVOUS SYSTEM** CARRIES INFORMATION TO AND FROM THE CNS.

TWO SUBDIVISIONS.

THE **SOMATIC NERVOUS SYSTEM** DEALS WITH THE 'OUTSIDE WORLD', TRANSMITTING INFORMATION FROM THE SENSORY ORGANS TO THE CNS AND FROM THE CNS TO THE SKELETAL MUSCLES.

THE **AUTONOMIC** NERVOUS SYSTEM DEALS WITH THE 'INSIDE WORLD', TRANSMITTING INFORMATION TO AND FROM OUR INTERNAL ORGANS.

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