

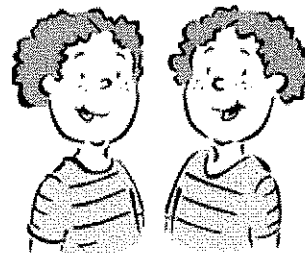
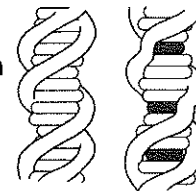
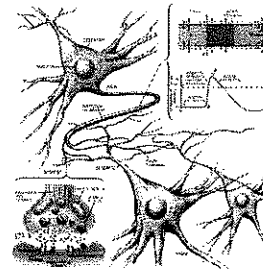
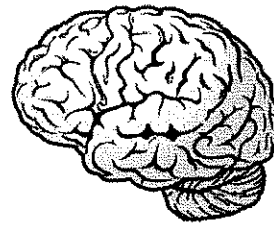
# Biological Bases of Behaviour

## Unit 3- The Brain

### *Modules 9-15*

#### Topics Covered:

1. Neural Communication (Module 9)
  - a. Neurons, communication, neurotransmitters
2. The Nervous System (Module 10)
  - a. The Peripheral Nervous System
  - b. The Central Nervous System
3. The Brain (Module 11)
  - a. The lower level brain structures
  - b. The Cerebral Cortex
4. The Cerebral Cortex (Module 12)
5. Brain Hemispheres & Consciousness (Module 13)
6. Behaviour Genetics (Module 14)
  - a. Twin Studies, Adoption Studies, Gene/Environment Interaction
7. Evolutionary Psychology & Human Nature (Module 15)



## Unit 3 Neuroscience & Behaviour

"Everything psychological is simultaneously biological."

*The brain's ultimate challenge? = to understand itself. ☺*

### Vocabulary

1. Biological Psychology
2. Neuron
3. Dendrite
4. Axon
5. Myelin Sheath
6. Action Potential
7. Threshold
8. Synapse
9. Neurotransmitters
10. Acetylcholine
11. Endorphins
12. Nervous System
13. Central Nervous System
14. Peripheral Nervous System
15. Nerves
16. Sensory Neurons
17. Inter-neurons
18. Motor Neurons
19. Somatic Nervous System
20. Autonomic Nervous System
21. Sympathetic Nervous System
22. Parasympathetic Nervous System
23. Reflex
24. Neural Networks
25. Lesion
26. Electroencephalogram
27. CT Scan
28. PET Scan
29. MRI
30. Brainstem
31. Medulla
32. Reticular formation
33. Thalamus
34. Cerebellum
35. Limbic System
36. Amygdala
37. Hypothalamus
38. Cerebral Cortex
39. Glial Cells
40. Frontal Lobes
41. Parietal Lobes
42. Occipital lobes
43. Temporal lobes
44. Motor Cortex
45. Sensory Cortex
46. Association Areas
47. Aphasia
48. Broca's Area
49. Wernicke's Area
50. Plasticity
51. Corpus- Callosum
52. Split Brain
53. Endocrine
54. Hormones
55. Adrenal Glands
56. Pituitary Gland

## Chapter 3: The Nature and Nurture of Behaviour

“What makes you, you? Your Biology or your Environment?”

### Vocabulary

1. Chromosomes
2. DNA
3. Genes
4. Genome
5. Natural Selection
6. Mutation
7. Evolutionary Psychology
8. Gender
9. Behaviour Genetics
10. Environment
11. Identical Twins
12. Fraternal Twins
13. Temperament
14. Heritability
15. Interaction
16. Molecular Genetics
17. Culture
18. Norm
19. Personal Space
20. Memes
21. X-Chromosome
22. Y-Chromosome
23. Testosterone
24. Role
25. Gender Role
26. Gender Identity
27. Gender-Typing
28. Social Learning Theory
29. Gender Schema Theory

### Questions to be able to answer from Unit 3

1. Explain the relationship among chromosomes, DNA, genes, genome, and nucleotides.
2. Explain heritability? What are the concerns about doing genetic testing on unborn offspring?
3. Many researchers have recently concluded that the shared home environment has less effect on children's development than is often supposed, and that peer influences matter more than we realize. What evidence supports this conclusion?
4. What are gender roles, and what do their variations tell us about our human capacity for learning and adaptation?