
Teacher Guide: Unit 13 The Mind and the Brain

Guidance for Teachers

- Guidance on delivery – Page 163-165 – or reference to this from the specifications. This includes further guidance linked to 13.2 What You need to Learn
- Resources – Page 170-171 – includes websites/text books/organisations/publications

Guidance on Assessment

- Assessment guidance – Page 166-169 – or reference to this from the specifications
- Assessment Evidence grid Unit 13 – attached.

Assignment Work

- The assignment briefs included with this unit are expected to give some ideas on how to cover the required assessment criteria.
- It is important that the time spent on the topic area links to the mark awarded.
- It is hoped that centres will use this idea as a starting tool.
- An assessment recording sheet is included – as a suggestion for possible ways to record marks awarded.

Suggested Time Allocation

- Based on 50-60 hours spent on this unit
- Includes work on assignment + teaching and learning time
- Some time should also be reserved for feedback and return of work after/before moderation.

Assessment Objective to be Covered	Mark Awarded	Possible Time Allocation
AO1	10	12 hours
AO2	14	16 hours
AO3	26	30 hours

Teacher Resource Material

- Assignment No. 13.1: *Fact Sheet on Stress*
- Assignment No. 13.2: *The Brain: Damage, Disease or Drug Abuse*
- Assignment No. 13.3: *Methods of Studying the Brain*
- Assignment No. 13.4: *An Investigation into Cognitive Functioning*
- Assessment Recording Sheet – suggestion of a possible method to collate marks from assignments.

Unit 13: The mind and the brain				
What you need to do:				
<p>You need to produce evidence of a comprehensive exploration of research methods employed in the study of mind and brain [50 marks]. This evidence needs to include:</p> <p>AO1: the production of two sets of fact sheets designed to raise mental-health awareness, one set on stress and illness, and the second set on research methods employed in the study of the healthy and the damaged brain [10];</p> <p>AO2: an evaluation of the scientific methods and techniques used in the study of mind and brain, together with a consideration of associated ethical issues and evidence of statistical research [14];</p> <p>AO3: the design and safe execution of a simple experiment to investigate one aspect of cognitive function and an investigative study into memory loss [26].</p>				
How you will be assessed:				
Assessment Objective	Mark Band 1	Mark Band 2	Mark Band 3	Mark Awarded
AO1	You will produce one fact sheet including selected information about stress and related illness that has been clearly presented; [0 1 2]	you will produce one detailed set of researched fact sheets including a clear definition of stress, its possible causes and its effects on health, with relevant information selected and clearly and logically presented; [3]	you will produce one set of detailed fact sheets, detailed work based on thorough research, including a clear definition of stress, its possible causes and its effects on health with reference to intervention programmes; you will provide evidence that relevant information has been selected from a variety of sources and is clearly and logically presented. [4 5]	/10
	You will produce one fact sheet including selected information about the study of the brain that has been clearly presented; [0 1 2]	you will produce one detailed set of researched fact sheets that have been clearly presented, based on the study of the brain; [3]	you will produce one set of detailed fact sheets, detailed work based on thorough research into both the healthy and the damaged brain, with evidence that relevant information has been selected from a variety of sources and is clearly and logically presented. [4 5]	
AO2	You will demonstrate a basic knowledge of the methods used in studying the brain and how they are used in an experimental or a clinical setting; [0 1 2]	you will demonstrate knowledge and understanding of the methods used in studying the brain and explain how they are used in both an experimental and a clinical setting; you will mostly use scientific terms accurately; [3 4 5]	you will demonstrate a thorough knowledge and understanding of the methods used in studying the brain; you will explain how such methods are used in both an experimental and a clinical setting, and how they are used in confirming hypotheses regarding normal brain function and in the diagnosis of brain diseases; you will use appropriate scientific terms accurately throughout. [6]	

Unit 13: The mind and the brain (continued)				
Assessment Objective	Mark Band 1	Mark Band 2	Mark Band 3	Mark Awarded
AO2	You will carefully select information and present it clearly; you will acknowledge the ethical aspects of brain research; [0 1 2]	you will select carefully a wide range of information, giving reasons for your choice of resources; you will present information clearly and logically; you will discuss the moral and ethical implications of brain research; [3]	you will demonstrate an ability to identify the preferable methods for investigating a particular research question; you will evaluate information both for and against a method, presenting it clearly and logically; you will discuss comprehensively moral, ethical and conceptual considerations associated with the various methods employed in brain research; you will provide evidence of statistical research. [4 5]	/14
	You will prepare a fact sheet involving statistical evidence with basic calculations shown; [0 1]	you will complete a fact sheet detailing statistical evidence, including statistical-test calculations with some summary of results; [2]	you will present statistical evidence with appropriate complex statistical calculations with full explanation of the rationale behind the test and result gained. [3]	
AO3	You will carry out a simple experiment to evaluate a particular cognitive function following ethical guidelines; [0 1 2]	you will design and carry out a simple experiment to evaluate a particular cognitive function showing evidence of consideration of ethical guidelines; [3]	you will design and carry out an experiment to evaluate a particular cognitive function showing evidence of all relevant ethical guidelines and steps taken to reduce risk. [4 5]	/26
	You will plan and investigate a research problem and show that you have considered appropriate ethical issues; [0 1 2]	you will plan confidently and complete your research problem, identifying its advantages and limitations; you will provide evidence that you have considered ethical issues; [3 4 5]	you will plan thoroughly and complete your research problem; you demonstrate a clear understanding and justification of your work; you demonstrate consideration of ethical issues in your design. [6]	
	You will record data relating to your design and display the data; [0 1 2]	you will record precisely relevant data and display the scientific data accurately in a range of ways using tables and simple graphs; [3 4 5]	You will record precisely a detailed data set; you will display the scientific data accurately in a range of ways; you will collect sufficient data to complete simple statistics on the results. [6]	
	You will offer a basic interpretation of the results; [0 1 2]	you will interpret the results and draw basic conclusions, explaining your results clearly, making real-life application wherever appropriate; [3]	you will interpret the results in detail using secondary sources to support your findings and draw conclusions relating to your results. [4 5]	
	You will offer a basic evaluation of your work; [0 1]	you will provide examples of how your work could be improved upon; whether your chosen method is the most suitable, identifying advantages and limitations; [2 3]	you will provide practical and clinical analogies wherever appropriate and discuss how your experimental design could be modified using other existing methods and suggestions for further research. [4]	
Total mark awarded:				/50