Unit 1 Psychology

AoS 3: Student Directed Research Investigation

LOGBOOK

NAME: ______________________________

TEACHER: ______________________________
Task description

You are required to investigate and communicate a response to a question related to any topic we have covered in Unit 1. This will involve you investigating a research question, formulating a hypothesis, and then sourcing and analysing at least two pieces of contemporary research that address this question. You will then communicate your findings to an intended audience in a report. It can be presented in various formats.

For example:

✓ A digital presentation
✓ An oral presentation
✓ A written report
✓ Or other appropriate format.

Key knowledge- What am I going to be assessed on in this task?

- **My ability to effectively communicate scientifically.** This includes the accuracy of scientific information I present; the clarity of my explanation of scientific concepts, ideas and models; the appropriateness for purpose and audience; the contextual clarity in terms of importance, authorisation and implications of findings; as well as conciseness.

- **My demonstrated understanding of the concepts specific to the investigation.** Including definitions of key terms; use of appropriate scientific language, conventions and representations; use of relevant models in organising and understanding observed phenomena and psychological concepts, and their limitations.

- **My ability to analyse the information:** This includes being able to distinguish between weak and strong evidence, and scientific and non-scientific ideas. It also includes a consideration of the validity and reliability of data, such as sources of possible errors or bias.

- **My demonstrated understanding of Ethical factors relevant to my selected question.**

**NOTE:** For authentication purposes, you must keep a record of all the work you complete in this booklet and this booklet must be submitted to your teacher, along with your report as a part of your assessment.

A table is located at the back of this booklet in order to keep track of your progress!!
<table>
<thead>
<tr>
<th>Section</th>
<th>Points to address.....</th>
<th>Check</th>
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<tbody>
<tr>
<td>Research Question</td>
<td>✓ What is your research question?</td>
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<td></td>
<td>✓ Who is the target audience for your report? (Who will you be informing?)</td>
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<tr>
<td>Introduction:</td>
<td>✓ Describe your research question in more detail. (Start broad and get more specific)</td>
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<td>✓ Consider things such as:</td>
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<td>- What does your question actually mean?</td>
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<td>- What do we know about the question?</td>
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<td>- Who does the question impact?</td>
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<td>- Why is it an important question?</td>
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<td></td>
<td>✓ What are the relevant key terms, models and theories needed to understand your research question?</td>
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<td>✓ Describe/define these terms.</td>
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<td>✓ Explain any links between these terms and how they relate to your research question.</td>
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<td>✓ Considering your research topic, formulate a hypothesis. Predict what you think you will find out once you have gathered evidence.</td>
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<td><strong>NOTE: ensure you record all details needed to reference any secondary sources.</strong></td>
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<td>Scientific Evidence/Data</td>
<td>✓ Summarise at least two pieces of contemporary research/evidence related to your research question. Ensure you include:</td>
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<td>- The aim.</td>
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<td>- A summary of the procedures involved.</td>
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<td>- A summary of the results (any relevant data).</td>
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<td>- The conclusion(s).</td>
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<td><strong>NOTE: Ensure that you record all of the details of the sources you use in order to reference correctly.</strong></td>
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<td>Analysis:</td>
<td>✓ Discuss whether the evidence you have found supports the theory and hypothesis you formulated.</td>
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<td>✓ Discuss any potential limitations of the evidence. For example, any biases or problems with the procedures involved in the research.</td>
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<td>✓ Consider the implications of these limitations on the validity of the results.</td>
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<td>✓ Discuss whether the results have been replicated and how this may affect the reliability of the evidence.</td>
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<td>✓ Comment on the sample (for example characteristics such as age, sex or sample size) it's effect of the sample used on the reliability of the evidence.</td>
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<td>✓ Address any ethical considerations that you think need to be accounted for in your field of research.</td>
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<td>✓ Distinguish if the sources you have used scientific and non-scientific ideas.</td>
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<td>Conclusion &amp; Generalisation</td>
<td>✓ Make a concluding statement that addresses the research question.</td>
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<td>✓ To what extent does the evidence from your investigation answer your research question and support your hypothesis?</td>
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<td>✓ What recommendations could you make, for modifying or extending the investigation?</td>
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<td>✓ Can this conclusion be generalised? Why/why not?</td>
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<td>✓ Suggest any implications of your findings?</td>
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NOTE: Your research question can be chosen from the suggested options listed below, or you may make up your own with guidance from your teacher.

Option 1: Biopsychology

Questions that may be explored in this investigation include:

- Are different sexes psychologically, as well as biologically, different?
- Why is the blood-brain barrier important when considering behaviour?
- How do brain structures in other animals compare with those in humans?
- How robust is left/right brain dominance theory?
- How can brain trauma in sporting injuries affect cognitive function?
- Do people use all of their brain capacity?
- How ‘plastic’ is our brain?

Option 2: Brain and use of technology

Questions that may be explored in this investigation include:

- Are ‘brain training programs’ effective?
- How does the use of technology impact on brain functioning?
- Is the use of digital devices suitable for young children?
- Is the internet changing the way we think and behave?
- How has neuroimaging changed our understanding of brain structure and function?
- How can technology be used to help people recover from brain trauma or injury?

Option 3: Psychological development

Questions that may be explored in this investigation include:

- How does learning to play a musical instrument affect brain development?
- How is pre-natal development affected by environmental factors?
- Is Piaget right?
- How do different parenting styles affect the psychological development of children?
- What are the advantages and disadvantages of play-based learning for pre-school aged children?
- What can twin studies tell us about the influence of genes and environment on development?
**Option 4: Intelligence and IQ testing**

Questions that may be explored in this investigation include:

- Does intelligence exist?
- Is intelligence inherited or does environment have an influence?
- Is intelligence a single ability or does it involve multiple abilities?
- Is it possible to create artificial intelligence?
- Are intelligence tests biased?
- Is emotional intelligence more important than intelligence quotient in the workplace?

**Option 5: Personality**

Questions that may be explored in this investigation include:

- Does personality exist?
- Are personality disorders inherited?
- How relevant is Freud to modern psychological debates on personality?
- Is the person or the situation more influential in determining a person’s behaviour?
- Is vocational testing really an assessment of personality?
- Is it possible to ‘change’ a person?

**Option 6: Cognition**

Questions that may be explored in this investigation include:

- What happens in the brain when we feel different emotions?
- Why are humans able to create art and invent things?
- Can creativity and imagination be fostered?
- How does the brain solve problems?
- Does extra-sensory perception exist?
- How is the brain involved in ‘self-actualisation’?
- Is critical thinking different from creative thinking?
Step 1 – Establish your research question and your audience.

This is the most critical part of your research investigation. You need to be clear about what it is that you would like to explore. Do you have any burning Psychology related questions that you would like to answer?

*Brainstorm potential questions below (remember they must relate to one of the options at the beginning of this booklet).*

Now choose ONE option and ONE specific question you would like to investigate!

**Which option have you chosen? Write the name and number here…..**

__________________________________________________________________________

__________________________________________________________________________

**What is your specific research question? Write it here….**

__________________________________________________________________________

__________________________________________________________________________

In all forms of writing or presenting you have to be aware of your intended **audience**. Knowing your audience is crucial for many reasons. It guides your writing and presentation style. There is no need to refer to your audience specifically in your investigation but it should be clear through your writing style and the development of your report who your audience is.

*Brainstorm some potential audiences below (they should be people who would be interested or might be concerned about your research question).*

__________________________________________________________________________

Who is your chosen audience? ____________________________________________________________________________
Step 2 – Identify and define/explain any relevant key terms or theories.

Approach this step by considering what is important for the audience to know about. Make sure to consider any background theory or knowledge in the area you are investigating, that you have learnt in Psychology and relay this to your audience. What do the terms you are going to use mean and how do they fit together?

List any relevant terms or theories in the box below and define/describe them. Be sure to record the details you need to reference the source(s) you have used…….

Relevant terms/theories:

Based on your understanding of the key terms/theory, formulate a hypothesis in relevance to your research question.

It is predicted that
Step 3 – Scientific evidence/data

You must source at least two pieces of contemporary research that provide evidence related to your research question.

Be sure to include: the aim of each, a summary of the procedures and a summary of the results.

Source 1- List all of the details needed for appropriate APS referencing here……

Now describe the aim, procedure and results/conclusions of this research…. 

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Now describe the aim, procedure and results/conclusions of this research.....
Step 4 - Analysis

Now it’s time to establish if the evidence you have gathered actually supports the theory and the hypothesis you formulated?

Comment on this here.........

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Now consider any potential limitations of the evidence?
Is there a possibility that it is biased, opinionated or anecdotal?
Are there any possible sources of error? Problems with the way the research was conducted?
Comment on these questions here........

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Now consider the validity (it must be conducted and shared in such a way that it measures what it claims to have measured) and reliability (it can be/has been replicated by others) of the evidence you have gathered.
Comment on both here.........

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Research must also be conducted and shared with **integrity**. This means that all ethical considerations and standards must be adhered to in every way. Consider the relevant ethical principles and comment on whether they have been adhered to or not.

**Distinguish** if the sources you have used include scientific or non-scientific ideas.

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**Step 5 – Conclusion and Generalisation**

What have you found out about your research question? Has your hypothesis been? Suggest any recommendations for modifying or extending your investigation in the future.
Discuss the implications of your research findings? How can the evidence you have gathered be used to benefit relevant society?

Finally, can the conclusion(s) you have drawn, be generalised to the relevant population(s) or society as a whole?

Now compile all the information in this booklet to put your presentation together!!
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<th>Description of work completed</th>
<th>Teacher Signature</th>
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