# Psychology – ATAR Year 12

## Task 3 — Unit 3

**Assessment type:** Investigation

**Complete in class:** Experiment - 1st April

Investigation write-up - 5th and 6th April

**Conditions**

Time for the task:

* one week to conduct the investigation, collect the data and research the evidence for the role of serial position effect in short-term memory
* Two lessons to write the scientific report in class under supervised conditions

Materials required for writing the scientific report:

* data (tables and graphs)
* list of references
* a computer with access to the internet
* your teacher may require you to hand in your work via Turn-it-in

Teachers should refer to the ethical guidelines for teaching Psychology and the ethically approved investigations available on the School Curriculum and Standards Authority website.

**Task weighting**

7.5% of the school mark

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Examining short-term memory through the serial position effect (48 marks)**

You will be examining your short-term memory through the serial position effect. Specifically, you will investigate whether your ability to recall items from a list reflects the pattern suggested by the serial position effect, i.e. more items from the start and end of a list are recalled correctly than items in the middle of the list.

Participants in this investigation will be required to remember and recall as accurately as possible sets of 10-digits in the order they are presented. Participants will be presented with five sets of digits and will be given the chance to recall the digits at the end of each set on a provided data sheet. The data collection for this investigation will take place during regular class time.

Using your class notes and library research, make succinct notes on the theories and evidence related to this topic. You are permitted to use your computer and the internet to help write your report but you must hand in only your “original work”.

Your scientific report will include:

* an abstract – provide an overview of the investigation, including the aim, hypothesis, main features of the method, summary of results and conclusion/s (7 marks)
* an introduction – provide information and research related to the topic for the investigation (7 marks)
* method – describe the participants, materials and procedures so that the investigation can be replicated (7 marks)
* results – represent data in a written summary, tables and graphs (8 marks)
* discussion and evaluation (13 marks)
  + discuss the results of the investigation and how they relate to relevant psychological theories
  + evaluate the design of the investigation and explain how the investigation could be improved
  + discuss how ethical issues were addressed
  + explain the relevance of the results to the population from which the sample was drawn, and to theory or other research
* conclusion – relate the results to the hypothesis or research question (2 marks)
* references – provide an alphabetical list of any references used in the report (3 marks)
* appendix – attach your data sheet. (1 mark)

# Marking key for assessment task 3 — Unit 3

* an abstract – provide an overview of the investigation, including the aim, hypothesis, main features of the method, summary of results and conclusion/s

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * states an aim/hypothesis * hypothesis is operational | 1–2 |
| * briefly describes the method, including   + the participants   + materials used   + how the task was administered | 1–3 |
| * states the results of the research * draws a relevant conclusion | 1–2 |
| **Total** | **7** |

* an introduction – provide information and research related to the topic for the investigation

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * makes a relevant statement about short-term memory (STM), describing its main features | 2 |
| * makes some comments about STM | 1 |
| **Subtotal** | **2** |
| * explains the serial position effect | 3 |
| * describes the serial position effect | 2 |
| * briefly comments on the serial position effect | 1 |
| **Subtotal** | **3** |
| * supports above information with reference to relevant research | 2 |
| * refers to some research without making links to the topic | 1 |
| **Subtotal** | **2** |
| **Total** | **7** |

* method – describe the participants, materials and procedures so that the investigation can be replicated

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * describes participants in sufficient detail to be replicated, e.g. number, age, gender * describes the selection process | 1–2 |
| * describes materials * provides sufficient detail to be replicated | 1–2 |
| * describes the procedure, including:   + addresses anonymity   + describes task in sufficient detail to be replicated   + describes the collection, collation and presentation of results | 1–3 |
| **Total** | **7** |

* results – represent data in a written summary, tables and graph

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * organises all relevant data logically in correctly labelled tables   + correctly organises table   + correctly labels table, including units, where appropriate   + includes relevant data | 1–3 |
| * presents data in a graph   + correctly graphs data   + uses appropriate labelling   + uses appropriate titles | 1–3 |
| * states results of the investigation * provides an accurate summary of the data | 1–2 |
| **Total** | **8** |

* discussion and evaluation
  + discuss the results of the investigation and how they relate to relevant psychological theories
  + evaluate the design of the investigation and explain how the investigation could be improved
  + discuss how ethical issues were addressed
  + explain the relevance of the results to the population from which the sample was drawn and to theory or other research

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * discusses the results of the investigation, relates the results to the hypothesis and explains how they relate to relevant psychological theories | 4 |
| * discusses the results of the research supports, comments on the hypothesis and describes relevant psychological theories | 3 |
| * describes what happened in the investigation and cites relevant psychological theories | 2 |
| * describes what happened in the investigation | 1 |
| **Subtotal** | **4** |
| * evaluates the investigation design:   + discusses any methodological flaws   + explains steps taken to ensure reliability and how it could be improved | 3 |
| * explains how variables are controlled and suggests ways to improve reliability | 2 |
| * states that variables need to be controlled and suggests how to improve reliability | 1 |
| **Subtotal** | **3** |
| * discusses ethical issues and describes how these were addressed | 2 |
| * refers to ethical issues that were considered in the investigation | 1 |
| **Subtotal** | **2** |
| * discusses relevance of results to the population from which the sample was drawn as well as to theory or other research referred to in the introduction | 2 |
| * suggests how the investigation might be of relevance to science or society | 1 |
| **Subtotal** | **4** |
| **Total** | **13** |

* conclusion – relate the results to the hypothesis or research question

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * makes accurate conclusions that relate to the hypothesis or research question | 2 |
| * forms an accurate conclusion but does not relate it to the hypothesis or research question | 1 |
| **Total** | **2** |

* references – provide an alphabetical list of any references used in the report

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * relevant references * range of references * listed alphabetically | 1–3 |
| **Total** | **3** |

* appendix – attach your data sheet

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * appends data sheet | 1 |
| **Total** | **1** |