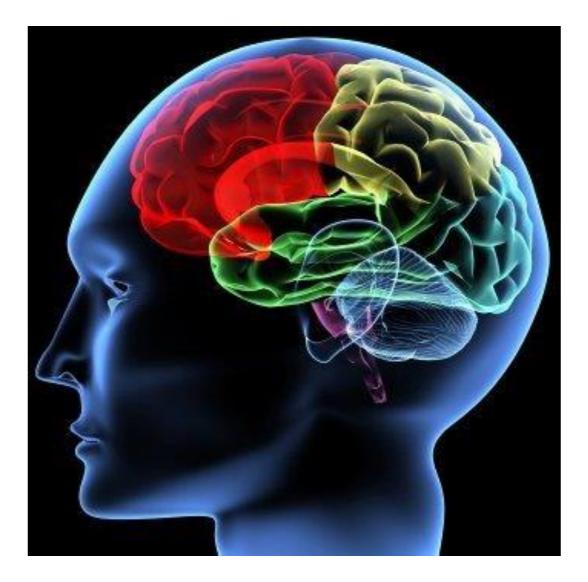


In Preparation for Psychology A Level Hinchingbrooke – Social Sciences Department

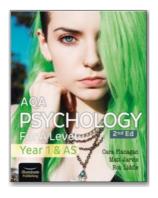


You must bring this with you to your first lesson in September, you can either write in this booklet or on separate paper.

## Introduction

#### About this booklet:

Congratulations for opting to study Psychology; we hope you will enjoy this fascinating subject. Some of your previous knowledge from your studies of maths and biology will be useful as you progress through the course. However, there will be a lot of new information which you will need to absorb quickly if you are to make satisfactory progress during the academic year. We have put this booklet together to prepare you for year 1 psychology. **You will need to bring it along to your first lesson.** Please complete the booklet to the best of your ability, as it will prepare you for study in year 12 and therefore increase your confidence. You can write answers in the booklet or on separate paper.





These are the suggested books for you to purchase. They will be of great help. You can get them second hand on Amazon

# <u>Task</u>

## What is Psychology?

## Find a definition of Psychology:

Psychology is not very useful unless it is *applied*. This means that there is a practical element to psychology, in that the theories and findings from psychology can be used to influence how schools, prisons, hospitals etc. should best cater for the people they look after. Psychology gives us tools to help improve people's lives. This could be through helping people improve memory or treating phobias.

# Psychology in the real world

Please find, print and bring to class with you an article that demonstrates or links to psychology in some way. This could be something you have seen in a newspaper, on the news or online.

## Approaches in Psychology

When we discuss religion, we are aware that we are not just talking about one religion, but many. Some religions agree with each other, some disagree and some co-exist without agreeing or disagreeing. Use this idea of different perspectives to help you understand the study of psychology. Think of psychology approaches as a collection of different beliefs or approaches about how the mind works. Some psychological approaches agree with each other, some disagree and some co-exist. Unlike religion, psychology is a science.

We will study each of the following areas of Psychology – use the internet any books you can gain access to, to find out 3 key points to describe each one.

# 1. Behaviourism

# 2. Social Learning Theory

- 3. Cognitive Psychology
- 4. Biological Psychology
- 5. Psychodynamic psychology

6. Humanistic psychology

#### Match the examples with the correct psychological approach:

#### 1. Behavioural Psychology, 2. Social Psychology, 3. Cognitive Psychology,

4. Biological Psychology, 5. Psychodynamic psychology, 6. Humanistic psychology.

Some psychologists want to find out whether children who are aggressive have learnt to behave in this way by copying a role model.

Some psychologists may want to look at **all** aspects of an individual when researching behaviour and would not compare that unique individual to any other person or animal.

Some psychologists want to examine how our behaviour is affected by physical changes, such as the stress response, 'Fight or Flight'

Some psychologists may want to analyse dreams to determine our inner most thoughts and desires.

Some psychologists want to find out if teenage smoking is linked to peer-group pressure.

Some psychologists try to think of ways in which we can all improve our memories.

2. Some of the above approaches believe that we are born with certain behaviours, that it is innate (nature); others believe that it is our environment that influences our behaviour, nurture (nurture). Plot each of the approaches along the nature-nurture spectrum below, note that it doesn't have to be at one end or the other, they can be plotted anywhere along the spectrum a long as you can explain why you've put it there.

Nature

Nurture

### **Memory**

Our everyday experience of memory is that there are two main types. Some are brief and quickly forgotten but other can last a very long time indeed. Psychologists broadly agree and have investigated in great detail the features of short-term and long-term memory.

#### Define these types of long-term memory and add your own examples of each:

**Episodic:** 

Semantic:

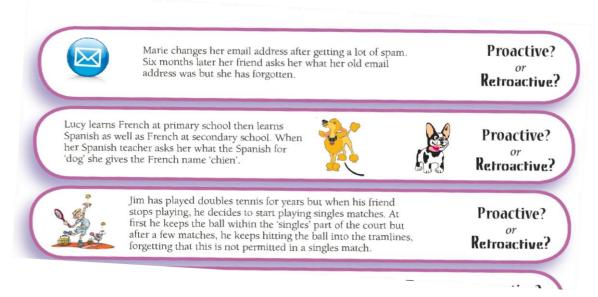
Procedural:

Forgetting is the other side of the coin to remembering. Psychologists have tried to understand and explain it by carrying out research studies and formulating theories about why we forget, one of these theories is interference. **Interference is forgetting because one memory blocks another, causing one or both memories to be distorted or forgotten.** 

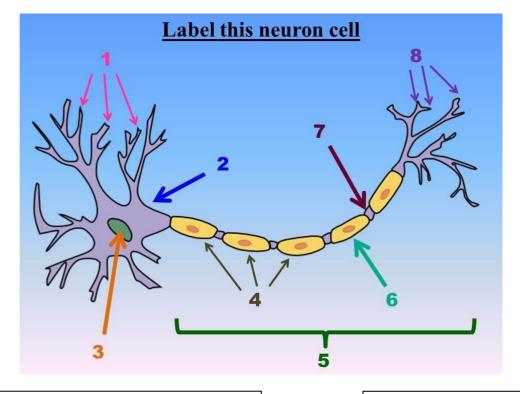
Define...

Proactive interference:

**Retroactive interference:** 



# **Biopsychology**



Nucleus Axon terminal buttons Myelin sheath Nodes of ranvier Schwann cell Cell body Dendrites Axon

Label each of the four coloured lobes (blue, purple, green and orange):

**Occipital lobe** 

**Frontal lobe** 

**Parietal lobe** 

**Temporal lobe** 

Can you now find and label the following areas?

Broca's area

Visual area

Auditory area

Wernickes area

Somatosensory area



# **Research Methods**

There are different types of research methods that psychologists use to understand the mind. Research the definition for each of these methods.

Experiment

**Observation Study** 

Case Study

Correlation study

Questionnaire

When carrying out research psychologists must select the experimental design that best fits the nature of their study. Research the definitions for each of these designs.

Independent groups

Repeated measures

Matched pairs

Psychologists must also decide the type of experiment which will be most appropriate for what they are researching. Research the definitions for each of these types.

Laboratory experiment

Field experiment

Natural experiment

Psychologists can use different sampling techniques to get participants for their research. Research the definitions for each of these techniques.

Random sample

Systematic sample

Stratified sample

Opportunity sample

Volunteer sample

You will remember from GCSE science needing to identify a dependent and independent variable within a study.

What is meant by independent variable (IV)?

What is meant by dependent variable (DV)?

# For each of the examples below identify the variable, to stretch yourself see if you can identify which experimental design was used.

**Experiment 1:** A psychologist wanted to study the effects of sleep deprivation. In one condition participants were asked to limit their sleep to only 2 hours per night for a week. In the other condition participants were encouraged to have 8 hours sleep per night for a week. Each day the participants' cognitive abilities were assessed using a memory test.

- IV:
- DV:
- Experimental design:

**Experiment 2:** A psychologist wanted to study whether the time of day affects performance on a maths test. He gave his participants a maths test to complete in the morning, and then a different maths test to complete in the afternoon.

IV:

- DV:
- Experimental design:

**Experiment 3:** A psychologist wanted to investigate invasion of personal space by conducting an experiment in a men's urinal. There were three conditions; a man stands right next to the participants while they urinate, one urinal away, or is absent. An observer recorded how long it took the men to urinate.

- IV:
- DV:
- Experimental design:

# You will also recognise the following maths calculations from GCSE, work your way through the questions below, you can use a calculator.

- 1. Please calculate the following: PERCENTAGES
  - a. 50% of 260
  - b. 10% of 450
  - c. 5% of 86
  - d. 3% of 62
  - e. 11% of70
  - f. 75% of 340
  - g. 25% of 652
- 2. Please calculate the following: FRACTIONS
  - a. 1/2 of 46
  - b. 1/4 of 58
  - c. 3/4 of 64
  - d. 1/5 of 500
  - e. 1/8 of 730
  - f. 1/3 of 100
  - g. 2/4 of 739
- 3. Please calculate the following: RATIOS
  - a. Share £48 between Alan and Barbara in the ratio 2:1
  - b. Share £60 between Laura and Robert in the ratio 1:3
  - c. Share 80 marbles between Stuart and Carl in the ratio 4:1
  - d. Share 91 sweets between Peter and Becky in the ratio 4:3
  - e. Share 70 coloured beads between Janet and Christine in the ratio 3:2
  - f. Share £120 between Carly and Paul in the ratio 3:5

- 4. Please calculate the following: MEASURES OF CENTRAL TENDENCY (AVERAGES)
  - a. What is the mean from this data set:
    - i. 8,7,6,5,2,2,3,4,6,8
  - b. What is the median from this data set:
    - i. 1,1,3,9,4,4,5,6,6,8
  - c. What is the mode from this data set: i. 1,2,2,2,4,5,3,2,1,7
  - d. What is the range of this data set:
    - i. 11,13,14,15,9,17,14,15,16
  - e. What is the mean from this data set:
    - i. 11,12,18,14,15,16,13,13,13,14
  - f. What is the median from this data set: i. 56,72,34,33,32,14,15,17,72,87
  - g. What is the mode from this data set:
    - i. 9,9,9,9,9,6,6,6,6,6,6,1,1,1,1,1,1,1
  - h. What is the range from this data set:
    - i. 1,1,1,1,1,1,1,1,1,1,1,1,1,1

## Ethics in Psychology

It is vital that you understand the importance of ethical awareness when conducting psychological research. Since we are trying to understand better how humans think, feel and behave, researchers will of course be working with people. Gone are the days when psychological researchers could just experiment on people without their permission or without properly informing them. To ensure that participants are protected, we have the British Psychological Society, which is a body that regulates and over-views psychological investigations and clinical practice in the UK.

Visit the BPS website and find out more about their ethical codes which are in place to protect participants and patients.

#### http://www.bps.org.uk/what-we-do/ethics-standards/ethics-standards

Read about the ethical guidelines and then answer the following questions.

- 1. What is meant by informed consent?
- 2. What is meant by the right to withdraw?

- 3. What is meant by deception? Why might this be an issue for psychologists?
- 4. What is meant by debriefing?
- 5. What is meant by confidentiality?
- 6. What types of harm must participants be protected from?