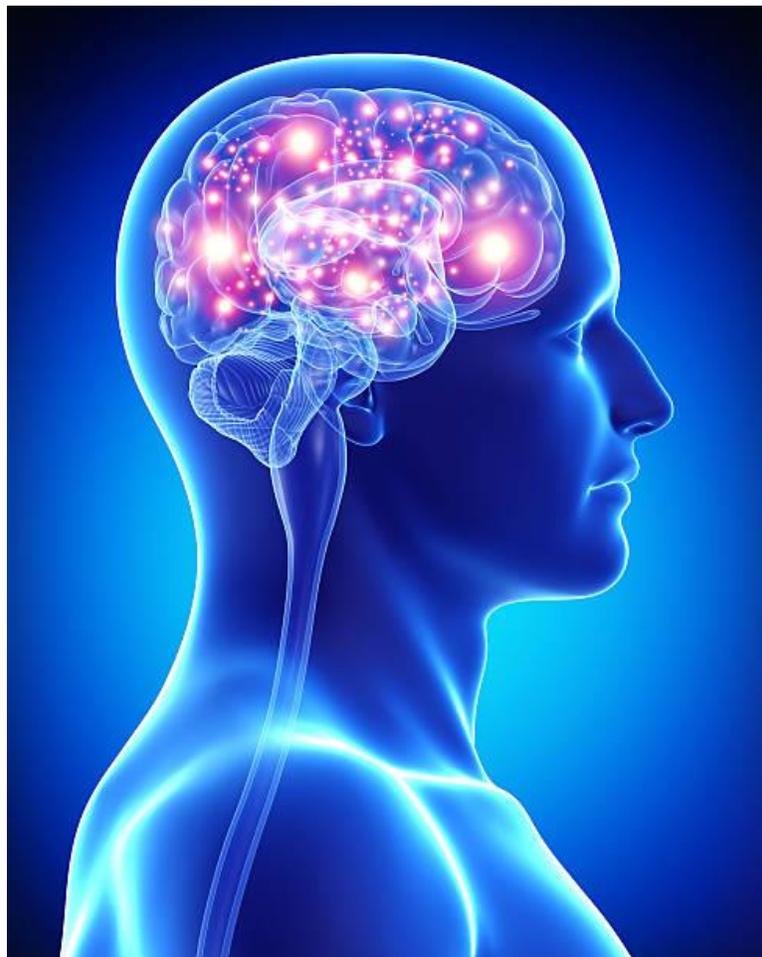


Summer Work

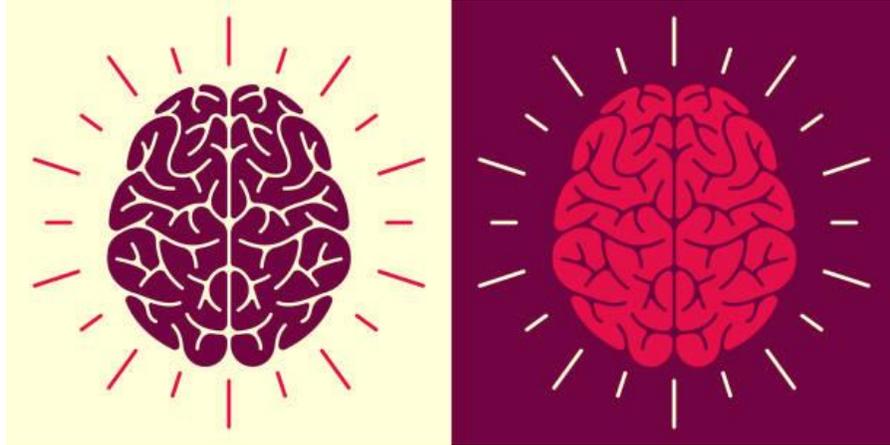


NAME: _____

What is Psychology?

Psychology is the scientific study of the mind. Psychology is about understanding what makes people tick through studying the inner-workings of our complex brains. Psychological research can help to address problems and issues in society such as aggression, addiction and mental health.

Psychology uses scientific methodology, using observation, measurement and testing to investigate the thoughts and motivations behind human behaviour. Studies have clear aims, procedures, results and conclusions



Psychology at Wyke

- Two year course
- 100% examination (3 exams in summer 2024)
- Pearson Edexcel exam board

It is essential that you have an interest in science, good mathematical skills and like reading and writing (as there will be lots of it!). Psychology is a fascinating subject, helping you to better understand yourself and others.



Over the two-year course, you will prepare to sit 3 exam papers:

Paper 1: Foundations in Psychology (*including social, cognitive, biological and learning theories*)

Paper 2: Applications of Psychology (*Health and Clinical Psychology*)

Paper 3: Psychological skills (*including methods, issues and debates and a synoptic review of studies*)

Psychology Enrichment

We offer a number of enrichment options in college including **guest speakers** and the 'Brain Day' workshop. One of our guest speakers was Professor Ben Ambridge (University of Liverpool) who gave a talk on the psychology of everyday life. The 'Brain Day' workshop is run by Dr Guy Sutton (Nottingham Medical School) and includes a sheep brain dissection and talk on mental health.

Watch part of Professor Ben Ambridge's talk here:

<https://www.youtube.com/watch?v=LxCCOcf3d6M&list=PL6AAF0xhxeelmtKPnTolIICuWUNTOZ1jq&index=4&t=0s>

Find out more about the 'Brain Day' workshop here:

<https://www.facebook.com/WykeSixthFormCollege/videos/837223406771906/>

We have run a **trip to London** which centred on a phobias workshop at London Zoo. Clinical hypnotherapist, John Clifford, explained how the therapy works and put the group under hypnosis (you can opt out!). We also visited Bethlem Museum of the Mind and had tea in The Rainforest Cafe.

Find out more about our London trip here:

<https://www.youtube.com/watch?v=kK2xCBdQZLM>

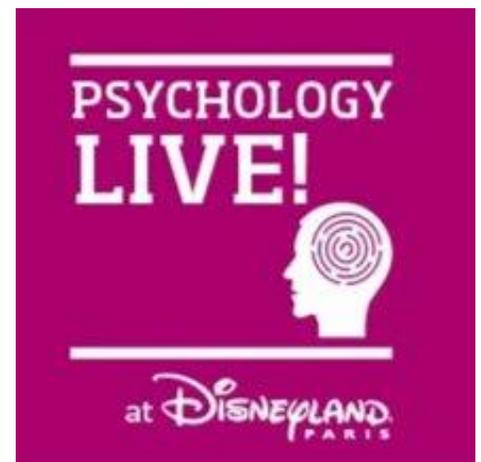


New for 2023

Disneyland Paris!

In March 2023 we will be attending a Psychology Live! Conference where you can hear from current Psychology professors and experts.

You will also have time in the two Disney parks and complete Psychology challenges around the parks!



Your summer work

- You must bring your preparation work to your first Psychology lesson

SECTION 1: Complete the glossary of essential psychological terminology

Use <https://www.tutor2u.net/psychology/reference/key-terms-for-a-level-year-1-as-psychology> to help you

Key term	Definition
Independent variable	
Dependent variable	
Sample	
Reliability	
Objectivity	
Subjectivity	
Internal validity	
Ecological validity	
Generalisability	
Nature	
Nurture	
Quantitative data	
Qualitative data	

SECTION 2: Social psychology

Social psychology is one approach you will study as a psychology student. Social psychologists focus on the impact of our social environment, investigating the ways other people affect our thoughts, feelings and behaviour.

This section will examine **social influence**, focusing on the question: Why do people obey?

Milgram's study of obedience (1963)

The **aim** of Milgram's study was to investigate what level of obedience would be shown when participants were told by an authority figure to administer electric shocks to another person. Milgram tested this using a controlled observation/experiment.

The **sample** consisted of 40 males aged between 20 and 50 years of age who were recruited by a newspaper advertisement which asked for volunteers to participate in a study of memory and learning at Yale University. They were each paid \$4.50 for their time and told they could keep this money regardless of the outcome of the study.

The **standardised procedure** began when each participant turned up to the laboratory alone and was greeted by the experimenter (Jack Williams) wearing a laboratory coat, before being asked to draw a slip of paper from a hat to determine which role he would play. The draw was rigged so the participant was always the teacher and Mr. Wallace (a confederate/actor) was always the learner.

The teacher (participant) and learner were taken to a room and in full view of the teacher (participant) the learner was strapped into the 'electric chair'. The experimenter explained to the teacher (participant) that the straps were to prevent excessive movement while the learner was being shocked; the effect was to make it impossible for him to escape the situation. An electrode was attached to the learner's wrist and electrode paste (cream) was applied to avoid blisters and burns. The participant (teacher) was told that the electrode was attached to the shock generator in the adjoining room. The participant (teacher) then heard the experimenter tell the learner 'although the shocks can be extremely painful, they cause no permanent tissue damage'.

Milgram created a phoney 'shock generator' which in the 1960s looked very impressive and realistic. The phoney shock generator had 30 switches marked clearly in 15 volt increments from 15 to 450 volts. The participant (teacher) was then seated in an adjacent room in front of the shock generator and asked to read a series of word pairs to the learner. The learner was asked to learn (memorise) these pairs. The participant (teacher) then tested the learner by giving him one of the words in a pair along with four other words. The learner had to indicate which of the four words had originally been paired with the first word. The learner's answer was communicated by pressing one of four switches which illuminated a light on top of the shock generator. If the answer was correct the participant (teacher) had to move onto the next word on the list, if the answer was wrong the participant had to tell the learner the correct answer and then the level of punishment that they were going to give them. They would then press the first switch on the shock generator (15 volts). For every subsequent incorrect answer, the participant was required to move one switch up the scale of shocks (15 volts higher than the voltage of the last shock delivered).

If the participant asked advice from the experimenter, whether it be; 'should I continue administering shocks', or some other indication that he did not wish to go on, he would be given encouragement to continue with a sequence of standardised 'prods' such as "Please continue" or "The experiment requires that you continue"
After the maximum shock had been administered, the participant was asked to continue at this level until the experimenter eventually called a halt to the proceedings, at which point many of the obedient participants heaved sighs of relief or shook their heads in apparent regret.

At this point, participants were debriefed and reunited with Mr Wallace who remained unharmed. Participants were followed up a year later to check on their state of mind and to offer counselling if required.

Milgram's **results** showed that all 40 (100%) of the participants obeyed the experimenter and delivered shocks up to 300 volts. 26/40 (65%) of participants delivered shocks up to the maximum 450 volts.

During the study, many participants showed signs of moral strain. Participants sweated, trembled, stuttered, bit their lips, groaned, dug fingernails into their flesh, and these were typical not exceptional responses. Quite a common sign of tension was nervous laughing fits (14 out of 40 participants), which seemed entirely out of place, even bizarre. Full-blown uncontrollable seizures were observed for three participants.

Milgram **concluded** that the most important factor determining obedience is the situation and he put forward several possible explanations for this high level of obedience. Including the fact that the experiment took place at the prestigious Yale University, that the participant believed that the experiment was for a worthy purpose and that the participant believed the victim had volunteered to be in the study and therefore has an obligation to take part even if the procedures become unpleasant. Milgram also concluded that 'obedience to authority is not a feature of German culture but a seemingly universal feature of human behaviour'.

Now watch this original footage of Milgram's study: [Milgram experiment 1963](#)



Task - Create 4 flashcards for Milgram's study. Only use bullet points and try to include images.

Cover the:

- **Aim & sample,**
- **Procedure,**
- **Results (quantitative and qualitative data),**
- **Conclusion**

SECTION 3: Cognitive psychology

Another approach you will study in psychology is cognitive psychology, which involves studying mental processes (e.g. memory, attention, language) in order to understand how we view and respond to our world. This section focuses on **memory**; how does memory work? Why do we forget things?

The multi-store model of memory

Use these links to research Atkinson and Shiffrin's multi-store model of memory:

- https://www.youtube.com/watch?v=7G9IK_mUmRE
- <https://www.simplypsychology.org/simplypsychology.org-Multi-Store.pdf>
- <https://www.tutor2u.net/psychology/reference/multi-store-model-of-memory>

TASK – Produce a mind map on the multi-store model of memory.

You must include:

- **Encoding, capacity and duration for each of the 3 stores**
- **A diagram of the model**

SECTION 4: Biological psychology

You will also study biological psychology, which investigates the influence of human biology on behaviour. Biological psychologists examine chemical activity in the brain, the role of hormones and genetic influences. Evolution and natural selection are also studied. This section will investigate **aggression** and uses methods such as twin studies and brain scans.

Twin Studies

Twin studies are used in psychology to establish the extent to which behaviours such as aggression are the result of nature (genes) and nurture (environmental influences).

Monozygotic and dizygotic twins are compared in terms of concordance rates (the probability that if one twin displays behaviour such as aggression, the other twin will also display it).

MZ or identical twins come from one egg and one sperm and so have identical genes. Their DNA is 100% the same and they are always the same sex. DZ or fraternal twins come from two eggs and two sperm and so are non-identical so can be same or different sex. They share around 50% of their genes and their DNA is only as similar as that of any siblings.

MZ twins share 100% of their genes whilst DZ share 50% of their genes. Therefore if concordance rates are higher for MZ twins compared to DZ twins the behaviour is more likely to have a genetic cause (due to nature) rather than an environmental cause (due to nurture).

Watch this short YouTube video: <https://www.youtube.com/watch?v=BTYCv1ObZrl>

Task – Use Quizlet to create flashcards about twin studies <https://quizlet.com/en-gb>

- **Monozygotic twins**
- **Dizygotic twins**
- **Concordance rates**

Print out your flashcards and bring them to your first psychology lesson along with the rest of your summer work.

Section 5: Learning Theories

The learning approach views psychology as a science and focuses on behaviours we can see, ignoring what cannot be seen (such as the mind). This approach assumes it is possible to establish general laws of learning which will allow us to predict and even control behaviour. You will study treatments for phobias (systematic desensitisation and flooding).

Systematic Desensitisation:

Systematic Desensitisation (SD) is a type of behavioural therapy based on the principles of classical conditioning. This therapy aims to remove the fear response to a phobia and substitute a relaxation response to the conditioned stimulus gradually using counter conditioning. It follows three clear steps.

Step 1: The patient is taught relaxation techniques e.g. how to control their breathing, muscle relaxation or meditation. This step is very important because of reciprocal inhibition where the fear response is inhibited because it is incompatible with relaxation.

Step 2: The patient creates a fear hierarchy working with their therapist. They start with a situation that creates the least fear and build up in stages to the most fear-provoking situation. Exposure to the object/situation can be done in two ways. Firstly, 'in vitro' which involves imagining the object or situation, and secondly, 'in vivo' which involves the patient being exposed to the object/situation in reality.

Activity	Fear level (0-100)
Stroking a dog	90
Going to a park with a dog walker	80
Watching a real-life dog show	50
Watching a cartoon dog show	40
Looking at a picture of a dog	30

Step 3: The patient works their way up the fear hierarchy starting with the least unpleasant object/stimuli and practising their relaxation technique at each stage. When they feel comfortable and are no longer afraid, they move on to the next stage in their hierarchy. If they feel anxious at any point, they can return to an earlier point on the hierarchy. This process is very gradual.

Task – Use Cornell notes to make a revision resource for this treatment

An explanation of how to use Cornell notes can be found here

<https://www.youtube.com/watch?v=WtW9lyE04OQ>

Section 6: Maths skills

In Psychology, 10% of the marks available are maths skills – in terms of overall marks, this works out at about one grade. To get prepared, answer the following questions...

Using percentages, fractions and decimals

Convert to a percentage:

1. 3 out of 5 students own a television.
2. The score on a test is 27 out of 40.
3. In a class, 22 students ate breakfast and 17 did not. Work out the percentage for each group.
4. Sam spent 20 minutes of a 90-minute exam writing an essay.

Convert to a fraction, reduced to simplest form:

5. 0.2
6. 0.62
7. 90%
8. 67%

Convert to a decimal:

9. 12
10. 340
11. 65%
12. 51.6%

Ratios

Put each ratio into its simplest form:

13. 4:3
14. 5:10
15. 15:5
16. 5:50
- 17.

Measures of central tendency: Mean, median and mode

18. Find the **mean** of the given data below, rounding your answer to the nearest whole number:

11 12 28 17 21 24 27

19. Find the **median** of the data given below:

15 20 10 15 14 23 14

20. Find the **mode** of the data given below:

1 4 6 2 10 11 12 8 10

Past exam questions:

21. Helen conducted an unstructured interview with residents in her local area about the behaviour of crowds in the park. Her sample group included 125 males and 175 females, all aged 24 years and over.

a) Calculate the **fraction** of Helen's sample who were female. Express your answer in its lowest form. [1 mark]

b) Calculate the **percentage** of Helen's sample who were male. Give your answer to the nearest whole number. [1 mark]

22. The results for an experiment are shown in **Table 1** below.

Participant	Condition A	Condition B
1	47	83
2	67	76
3	34	82
4	87	85
5	76	80
6	44	75
7	56	80
8	99	85
9	34	76
10	88	80

Table 1

Calculate the **mean** score for **Condition A**. Give your answer to one decimal place. [1 mark]

23. Some nurses were able to recall a higher number of words from the list of 20 than other nurses.

Calculate the correct **percentages** for participant A and participant B in **Table 3**. [2 marks]

Participant	Number of words recalled from a list of 20	Percentage of words recalled from a list of 20
A	17	
B	6	

Table 3

24. Manon decides to carry out a piece of research to test whether boys are quicker at completing computer games than girls. She carries out a laboratory experiment asking her sample of 9 females and 16 males to complete a car racing computer game. The scores for both groups are recorded in **Table 1** below.

Time taken (in minutes) to complete a car racing computer game	
Condition A Females	Condition B Males
18	18
19	17
19	17
22	18
25	21
30	16
23	13
20	14
22	16
-	18
-	14
-	16
-	17
-	18
-	14
-	14

Table 1

The mean score for the time taken by females in Condition A to complete a car racing computer game is 22 minutes.

Calculate the **mean** score for males in **Condition B** using the data in **Table 1**. You must give your answer to two decimal places. **[1 mark]**

25. Table 1 is a tally chart showing conformity in silent and noisy conditions.

	Condition one	Condition two
Conforming behaviour		
Non-conforming behaviour		

Table 1

Calculate the **percentage** of non-conforming behaviour in condition two of Chloe's investigation.

[1 mark]

26. Shamilla wanted to investigate the speed of cars being driven both with and without passengers. Using a hand held speed recorder, she measured the speed of cars and noted their occupancy.

Table 3 shows the results Shamilla recorded.

Speed of cars being driven without passengers Km/h	Speed of cars being driven with passengers Km/h
56	58
60	50
66	53
53	58
55	53
61	42
47	52
71	44
60	61
55	40

Table 3

Calculate the **median** speed for cars without passengers **and** the median speed for cars with passengers. [2 marks]

27. Table 1 shows the percentage of reduction in symptoms from Leonard's experiment.

	% of reduction in symptoms
New drug	25%
Placebo	10%

Table 1

Calculate Leonard's results as a **ratio**. You must express the ratio to the lowest whole numbers.

[1 mark]

25:10 =