

PSYCHOLOGY

FOR QUEENSLAND



STUDENT WORKBOOK

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SAMPLE CHAPTER UNCORRECTED PAGE PROOFS

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UNIT 4 PRACTICE ASSESSMENTS

Research investigation Chapter 20 Practical manual Answers

Individual thinking

PRACTICALS ASSIGNED TO THIS UNIT

Ţ,	SUGGESTED PRACTICAL
5	SUGGESTED PRACTICAL
2	MANDATORY

5.2 Expectation and perceptual set 7.6 Depth of processing and the retention of words in episodic memory

9.1 The effect of learning environment on memory

WORD WIZARD

Draw a line to match each term with the correct definition.

EPTION	
TORECEPTORS	
CEPTUAL SET	F 1
IGUOUS IRES	/
PHERAL VOUS SYSTEM	5
.ex	t
NTANEOUS OVERY	
FIDENTIALITY	/
IPITAL LOBE	2 2
AL GANGLIA	1
ТАМАТЕ	1
ΟΤΟΝΙΝ	-
HEIMER'S DISEASE	
SORY MEMORY	
OIC MEMORY) 1 1
LARATIVE MEMORY	-
NOLOGICAL LOOP	/
HOD OF LOCI	
ELLING	/ 1
DGNITION	1
IULUS ERALISATION	

- A predisposition to attend to certain aspects of the visual scene, or to interpret stimuli in a particular way, according to certain preconceptions
- When a person copies the behaviour or attitude demonstrated by another person
- Participants must not be identified in any way in terms of test results, their involvement in the study or any other confidential data
- A process of retrieval that requires identification of a correct response from a set of alternatives
- Simple, automatic response to a sensory stimulus
- The cerebral cortex at the rear of the brain; the location of the primary visual cortex and association areas involved with integration of visual stimuli
- A disease that progressively destroys neurons in the brain, causing memory loss
- Auditory memory in the sensory memory register
- A set of structures involved in the control of movement, gathering and channelling information from different areas of the brain
- A type of optical illusion that exploits visual similarities
- A storage system for auditory information in working memory A layers of specialised nerve cells that detect visual stimuli.
- They convert visual light energy into electrochemical energy. A long-term memory store of personal experiences (episodic)
- and facts (semantic)
- When a behaviour is displayed because of a discriminative stimulus that is similar to the original
- Communicates information from the body to the central nervous system and to the body's organs, glands and muscles
- The reappearance of an extinguished response after a rest period
- A store for incoming, fleeting sensory information
- Stimulus energy is collected by the eye (or other sense organ)
- A neurotransmitter in the brain involved in the regulation of mood, sleep, eating, arousal and pain
- A mnemonic that focuses on visualisations to strengthen memory
- An excitatory neurotransmitter in the brain involved in learning



UNIT 3 INDIVIDUAL THINKING 3

r,

Influences on visual perception

On a daily basis your brain is exposed to thousands of different stimuli through each of the senses. The eve can be thought of as a camera, but this is too simplistic. The human visual system extends beyond your eyes and relies on the interaction between sight organs and areas of your brain. This chapter focused on what influences an individual's visual perception of the world.

The biological structure of your eyes changes with aging; as you get older you may develop cataracts or other age related visual impairments. An individual's genetics also influences their vision; visual disorders, such as colour vision deficiency (colour blindness) can change an individual's perception of their environment. Visual perception is also influenced by perceptual constancies and Gestalt principles, which provide shortcuts for your brain to interpret stimuli with. Additionally, there are different cues that your visual system looks for depending on whether you are using one eye (monocular) or both eyes (binocular). Monocular depth cues rely on pictorial depth cues which are hints that the environment provides about depth, distance and proximity. Finally, human vision is influenced by the society and culture that an individual is exposed to, research between African tribes and western society shows that there is a different in the cues used to process information.

All of these influences guide how an individual interprets the world around them.

CHAPTER CHECKLIST

Read this checklist before you complete this chapter's activities, then return to it and check your understanding before your assessments.

Once you have completed this chapter you can use the 'I can...' statements to assess your understanding and rate yourself by ticking the appropriate box in the 'rating' column.

I can	Confidently	9	Partially	5	
summarise the biological influences on visual perception					
explain psychological influences on visual perception					
describe social influences on visual perception					

DATA DRILL 5

Visual impairment

A study conducted by Deregowski, Muldrow, and Muldrow (1972) investigated how the societal rules that govern our lives alter our visit perception of 2D and 3D pictures. They found that those living in a culture where photograph or pictures were uncommon were often unable perceive 3D perspectives within a 2D photogra A student decided to replicate this study in ord to investigate whether this effect still holds tod with the advancement of technology and use of mobile devices throughout the world. The researcher decided to show 10 participants from Uganda and 10 participants from Brisbane the same photograph shown in the Deregowski stu to investigate whether participants were able to perceive 3D within the 2D image. The results shown in Table 1.

An appropriate inferential statistic was conducted, and the results were found to be p = .15.



FIGURE 1 A similar image was used in the original 1972 study.

- 1 **Identify** the type of data collected in this study.

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al	Able to perceive 3D		
	Australian participants	Ugandan participants	
to	Yes	Yes	
ph.	Yes	Yes	
er	Yes	Yes	
7	Yes	No	
	Yes	Yes	
	Yes	Yes	
1	Yes	Yes	
	Yes	Yes	
ly	Yes	No	
	Yes	Yes	
e			

TABLE 1 Number of participants able to see 3D perspective within a 2D image

2 **Determine** the best type of inferential statistic to be used for this dataset and **justify** your reasoning.

Study tip

It is often useful when studying visual perception to use real life examples to help your understanding. Draw diagrams and pictures in your notes that will help you identify the different influences on perception.

EXPERIMENT EXPLORER 5

Modifying the 'rat-man' experiment

Perceptual sets can affect the way we perceive certain images. One of the ways in which we can alter someone's perception is the use of expectation on perceptual set. If someone is shown a particular set of images prior to seeing an ambiguous image (an image with two possible perceptions), it is more likely that they will see the image they have been primed with rather than the second image that is within the picture. This is how a lot of visual illusions work.

One such experiment that demonstrated the effect of expectation on perceptual set was the study of Bugelski and Alampay (1961): the experimenters primed participants with either images of a man or a rat and then showed them the infamous rat-man image and asked them to identify what they saw.

- **1 Modify** the rat-man experiment correcting the two limitations identified above. To do this:
 - **a propose** a new aim
 - **b** identify the new independent variable (IV) and dependent variable (DV)
 - **c create** a new research question.
- 2 The student experiment requires you to provide a rationale for the modifications you have made.
 - **a** Explain the rationale for your modification



FIGURE 2 The 'rat-mean' experiment was conducted in 1961 and therefore lacks ecological validity. Furthermore, the results collected were dichotomous in nature, which makes it difficult to analyse the results accurately.

- **b** Identify whether your modification is a research.
- experiment.
- this choice.

conducted using 14 year old participants.

6 Create an informed consent letter for participants in the study.

Study tip

When you are accessing research, make sure you consider the date of the research, as there may be a historical bias to the results. This can guide part of your source evaluation and spur ideas for possible modifications of those experiments.

<u>~</u> .	1		C .1	1
refinement,	redirection	or extension	of the	original

3 Propose a possible extraneous variable that you would need to control prior to starting your

4 **Determine** the most appropriate research design for your modified experiment and **justify**

5 Identify the ethical requirements that would need to be established if this experiment was being

RESEARCH REVIEW 5

Writing a research question

For the research investigation, you will be provided with a set of claims from your teacher. You will be required to select one claim, hopefully one that you find interesting. The following claim has been provided

'Our visual perception is flawed.'

When you create a research question, you must define the key terms and make the question as specific as possible. This includes defining an age group, a location (if you are comparing countries), gender or sex (if this is relevant), and any other information that may influence results.

1 Create a research question for the claim provided above.

Remember that using prompts, such as 'To what extent', 'Can' and 'Does', may help your research and answer your question.

FIGURE 3 A human eye.

Finding credible sources is important when conducting research: although a blog post may be interesting, the information may not be scientifically accurate. There are several ways to determine whether a source is credible, which adds to the validity and reliability of the results (e.g. the location it was published, the authors' background and whether there was any funding).

2 Use the research question you created in Question 1 to find one credible source to support your question and list the source below. **Summarise** why it is a credible source.

Resource 2

b Use the research question you created in your question and list the source below. **I**

Study tip

When reading any source of information, ensure that you note where it is sourced from. For example, if you are using a website, check the date it was updated or, if you are using a textbook, consider the in-text references or reference list at the back of the book. These can help you extend your research and help you write your research investigation.

n Question 1 to find one unreliable source that supports
Explain why it is not a credible source.



Individual thinking

Throughout the chapters in this unit, you have analysed and recorded data, modified an experiment and conducted research.

In this section, you will complete one of each of the following internal assessments:

- the Data test (10%)
- the Student experiment (20%)
- the Research investigation (20%; assessed in unit 4).

Unit 3 Data test

Dataset 1

A study conducted by Craik and Tulving (1975) investigated the levels of processing (LOP) model of memory. To simplify the experiment, the conditions were recreated with two levels: shallow and deep processing (the original experiment contained three levels). The rest of the experimental procedure is the same as the original study conducted by Craik and Tulving (1975).

Twenty participants were recruited to the study and were divided into two groups. An independent groups design was used, and participants were suitably informed about and consented to the experiment.

Results

The results of the experiment are shown in Table 1.

TABLE 1 Number of correctly recalled words in the shallow versus deep processing condition

Shallow (score out of 20)	Deep (score out of 20)
8	15
10	16
12	19
9	16
17	18
6	14
11	17
14	19
12	16
15	20

The standard deviations for the two conditions are given in Table 2.

TABLE 2 Standard deviations for each condition

Shallow processing	
3.34	

Dataset 1 questions

Item 1 (apply understanding)

• Calculate the mean for the deep processing condition.

Deep processing	
1.94	

2 marks

Item 2 (apply understanding)

• Calculate the median for the shallow processing condition

1 mark



• Determine why the median would be a more appropriate central tendency measure for the shallow processing group rather than the mean.

1 mark

Item 4 (interpret evidence)

• Compare the standard deviation across the two groups, and explain how this value explains the reliability and validity of the results.

2 marks

Dataset 2

Peterson and Peterson (1959) investigated the duration of short-term memory by asking participants to remember a list of trigrams and later recall the information under two different timed conditions. To simplify the experiment, only two conditions were used, one in which the participants were asked to wait 18 seconds (optimum time as established by Peterson & Peterson, 1959) and another in which they were asked to wait 60 seconds. The same group of 10 participants was used in both conditions. The results are summarised in Figure 1.



FIGURE 1 Mean number of trigrams recalled by participants after 18 and 60 seconds delay

Dataset 2 Questions

Item 1 (apply understanding)

• Identify the condition that achieved the higher mean number of trigrams recalled.

Item 2 (analyse evidence)

• Identify the mean number of words recalled by the 60-second delay group.

Item 3 (analyse evidence)

your reasoning.

Item 4 (analyse evidence)

• Determine the appropriate statistical test to use, and justify your reasoning.

Dataset 3

A study conducted by Albert Bandura (1961) on social learning and aggression has been pivotal to psychological understanding of behaviour and learning. Bandura's investigations focused on determining whether children would mimic certain aggressive behaviours when they observed adult models exhibiting these same aggressive behaviours. It was found that children who watched an aggressive model were themselves more likely to display aggressive behaviour.

1 mark

2 marks

• Based on the error bars, determine whether it is likely that the results will be statistically significant. Justify

1 mark

2 marks

A replication study was conducted on teenagers using models. However, the experiment aimed to determine whether watching a teacher model concentrate in class would lead to increased concentration levels amongst teenagers while they listened to an online lecture.

Subjects recruited to the study were divided into two groups: a control group, in which a teacher was silent in the class with the students for 3 minutes; and a concentration group who watched a video of a teacher concentrating in a lecture theatre for 3 minutes. The students were then asked to watch an educational video and make notes. The researchers observed the students and noted the number of concentration behaviours (keeping their eyes forward on the screen) exhibited by the students. The results are given in Table 3.

A *t*-test was conducted on the data and the *p*-value was found to be .001.

Dataset 3 Ouestions

Item 1 (apply understanding)

• Identify the mode of the concentration group.

Item 2 (analyse understanding)

• Calculate the mean of the control group.

Item 3 (analyse evidence)

• Determine an alternative inferential statistical test that would be more appropriate to use given the number of participants in the study.

Item 4 (analyse evidence)

• Draw a conclusion from the inferential statistics above.

2 marks

1 mark

2 marks

1 mark

TABLE 3 Number of concentration behaviours exhibited by

participants in the concentration video and control groups

Control group

3

6

5

3

5

6

8

1

Concentration group

10

8

12

10

15

9

10

11

11

14

Unit 3 Student experiment

Your task is to modify the following experiment. Please note you cannot conduct this experiment before completing a risk assessment and an ethics assessment. This is a requirement of the student experiment.





Context

In 1972, Craik and Lockhart devised the levels of processing (LOP) model of memory, which suggests that incoming sensory information is processed at three different encoding levels: shallow (structural - sight or touch), intermediate (phonetic - hearing) and deep (semantic - meaning). Deeper encoding levels are stronger and leave more memory traces behind. According to the LOP model, memory is a by-product of the encoding level's depth (Craik & Lockhart, 1972).

Several studies tested the LOP model of memory prior to Craik and Tulving's 1975 experiment. The 1975 experiment aimed to investigate the effect of the depth of the encoding level on the number of correctly recognised words. Twenty-four participants were shown 60 nouns, along with one of three different questions:

- Is the word in capital letters or not (structural)?
- Does the word rhyme with another (phonetic)?
- Do the words fit into a given sentence (semantic)?

Afterwards, all participants were asked to recognise the 60 nouns on a list with an extra 120 distractor words. The semantically encoded words had the highest recognition rate at 65%, whereas the structurally encoded words had the lowest at 17%. Therefore, the experiment supported the LOP model of memory.

This practical will again test the LOP model of memory by modifying Craik and Tulving's experiment. Only two levels of encoding will be tested (structural and semantic). The independent variable will be the level of encoding participants will be exposed to; the dependent variable will be the correct percentage of words recognised.

Aim

The aim of this experiment is to investigate the effect of the structural and semantic encoding levels on correct memory recognition.

End of paper



DEPTH OF PROCESSING AND THE RETENTION OF WORDS IN EPISODIC MEMORY (REPLICATION OF CRAIK & TULVING,

CAUTION: Informed consent must be gained by all participants to ensure they understand the risks and benefits of participating in the research. If the participants are under the age of 16, parental consent must be confirmed. Please check your school's requirements about informed consent. All participants must have the right to withdraw at any time. and all participant information collected must remain anonymous and confidential. All participants must participate

Materials

- Laptop
- Informed consent form
- Seating plan
- List of 30 stimulus words

Method

- 1 Collect a sample of students (n = 20) from your school to participate in the experiment using convenience sampling. To do this, you may put a notice on the bulletin to invite participants, or your teacher may assign students for your experiment.
- 2 Ask each participant for informed consent (or parental consent if they are under 16) and brief them on the details of the study (this is a simple memory experiment and no harm is anticipated).
- **3** Gather 20 sheets of paper and write the number '1' on 10 sheets and the number '2' on the remaining 10 sheets. This number will determine participant groups. Upon voluntarily agreeing to participate, have the participants select a number (1 or 2) at random (e.g. from a hat) and ask them to take a seat according to their number.
- 4 Once the participants have consented, distribute the answer sheets with 30 questions with the words 'yes' or 'no' displayed next to each word on the word list. Group 1 will circle 'yes' or 'no' to whether the stimulus word starts with a capital letter, whereas group 2 will circle 'yes' or 'no' to whether the stimulus word on the PowerPoint slide fits into the sentence written on their answer sheets. Participants must be seated by themselves in silence.
- 5 Once the word list presentation is completed, collect the answer sheets. Then distribute the recognition sheets with the 30 original stimulus words along with the 60 distractor words. Participants will have 5 minutes to circle as many of the 30 stimulus words as they can. The recognition sheets will then be collected.
- 6 Collect the recognition sheets and debrief and thank the participants for their time.
- 7 The recognition sheets should be scored and a raw score of the correct number of stimulus words recognised for each participant should be put in a table.

Results

Use the table below to collect the data.

- 1 Create a title for the table.
- 2 Enter the raw data for each group into an Excel spreadsheet. Using Excel equations (or hand calculations), calculate the central mean and standard deviation for each group.
- **3** Create a bar graph with the level of encoding as the independent variable (*x*-axis) and the mean as the dependent variable (y-axis).
- 4 Calculate whether the results are significant to an alpha level of .05 for a one-tailed test using the Mann–Whitney U test.

Discussion

- 1 Explain why the Mann–Whitney U test was chosen and what the significance level means. Suggest what the findings mean about your data.
- 2 Identify a possible limitation of the laboratory experiment and explain what effect that may have had on your data.

- Answer sheets
- Recognition sheets (with 60 distractor words)
- Briefing and debriefing notes

number	(structural)	(sema
1		
2		
3		
4		
5		
Evaluate the reli	ability and validi	ty of the

Group 1

Group

Participant

- validity.
- 4 State two methodological limitations and suggest an improvement for each.
- 5 Research other studies that have investigated the effects of levels of processing on memory. Summarise two scientific studies that support the LOP model. Can you find any research that suggests the model is not valid?

Modification of the experiment

Note: This section provides prompts for your modification. You may require extra space to write your full practice assessment.

Aim

Research question

Background research

2 ic)	Participant number	Group 1 (structural)	Group 2 (semantic)
	6		
	7		
	8		
	9		
	10		

study. You may use secondary research to help establish

Methodology	Discussion
Results	



Risk assessment

Name: _

Experiment title: ____

Note: All risks and ethical requirements should be managed by use of personal protective equipment (PPE) and/or specified control measures. Always consult your teacher before conducting an experiment.

Equipment required

Hazardous chemicals required/produced

Reactant or product name and concentration	GHS classification	GHS hazard statement	Control measures

Ethical requirements

In this section, you should create an information form about the experiment, as well as an informed consent letter.

Protective measures

Lab coat	Safety glasses	Gloves	Other

Student's signature: _____

Teacher's signature: _____

Date: _____

 * This assessment is not valid until it has been completed and signed by a teacher.

Unit 3 Research investigation

Note: The research investigation (IA3) is completed in Unit 4 and covers content from Unit 4. There is no assessable research investigation during Unit 3. This research investigation has been included so that you are able to practice skills required for the Unit 4 assessment.

CASE STUDY

An investigation into the aetiology of Parkinson's disease

Parkinson's disease is a degenerative disorder of the nervous system. It results from damage to dopaminergic neurons, which are dopamine-producing cells in the brain. Dopamine is a neurotransmitter that plays a critical role in the way our brain controls our movements and is thought to be a crucial part of the basal ganglia motor loop (Crane & Hannibal, 2009).

Symptoms of Parkinson's disease include tremors in the hands and limbs, whole-body fatigue and stiffness, cognitive issues, such as amnesia, confusion in the evening, dementia or difficultly thinking and understanding, impaired voice, anxiety, facial stiffness and nasal issues (Healthdirect.gov.au, 2018). Parkinson's disease affects 1 in every 350 Australians and 10 million people worldwide; there is no known cure. By determining the actiology of Parkinson's disease, more effective treatments can be developed.

A considerable amount of our understanding about the biological cause of Parkinson's disease comes from animal research – typically focused on mice. These models suggest that Parkinson's disease may be caused by the death of brain cells that produce dopamine (a neurotransmitter). These cells are located in the substantia nigra, a structure in the midbrain. The lack of dopamine affects the control of nerves that are responsible for movement (Baker & Graham, 2004). Animal research also has its own set of ethical considerations and should be undertaken with consideration.

Research into the aetiology of Parkinson's disease is ongoing, and a definitive cause has not been determined. It is debated whether biological or environmental factors are more prevalent in the onset of Parkinson's disease. Environmental factors include exposure to pesticides and methamphetamine use, whereas biological factors may include interference in neurotransmitter function - specifically dopamine - and genetics.

Your task is to conduct a research investigation about the following claim, which is related to the case study above. Parkinson's disease is caused by biological factors

Research question

Research

Note: this section provides space for you to investigate two sources; you will need to research further to complete the assessment.

• Title: _____

Resource 1

Source and credibility:

Authors: _____

- Publication date: _____
- Aim:
- Methodology
 - What data were collected?
 - How were the data collected?

Results

- Did the resource support your research question?

- Why does/doesn't the research question support the provided claim?

Resource 2

DI	•			
Plann	ing v	our ir	nternal	as
	0,			

Note: this section provides space for you to summarise the key points of your research. You may require extra space to write your full practice assessment.

- Source and credibility: ______
- Publication date: ______

• Aim: _____

- Methodology
 - What data was collected?
 - How was the data collected?
- Results
 - Did the resource support your research question?
 - Why does/doesn't the research question support the provided claim?

• Title: _____

• Authors: _____

ssessment

CHAPTER

Practical manual

Part of studying psychology is researching previous studies as well as conducting your own experiments to investigate different phenomena and theories. This chapter provides examples of the mandatory and suggested practicals from the Queensland Curriculum & Assessment Authority syllabus.

When you are conducting practicals in psychology, you need to be aware of ethical considerations. Understanding these considerations will help you evaluate the validity and reliability of research as well as ensure that you are being mindful of participants. Be aware of informed consent; your school will have guidelines for particular ages, and you may require parental consent for participants under 18 or 16 years of age.

Although these practicals act as a guide, it is the responsibility of teachers and schools to conduct their own ethical checks and risk assessments before conducting any of these practicals. Psychology for Queensland Units 3 & 4 obook assess provides risk assessment and lab tech note templates for each practical included in this chapter. No psychological research should be conducted without ethical consent. Always consult your teacher before conducting a practical, and be sure to check for any age-related ethical considerations.

In this section, you will have space to record results and take key notes; for full discussions, you may need extra space.

Please note there are no answers provided for this chapter, because the answers will vary depending on your results.



CAUTION: Before conducting any practical, make sure you have considered all ethical guidelines and that you have informed consent from all participants. Deception is needed in this experiment; you consult your teacher about what you should say and the detail needed in the debrief before you proceed.

Unit 3, Topic 2: Conduct an experiment to investigate the effect of expectation on perceptual set (e.g. the role of frequency in developing perceptual sets in Bugelski & Alampay, 1961). Source: Psychology 2019 v1.3 General Senior Syllabus © Queensland Curriculum & Assessment Authority

Context

Bugelski and Alampay (1961) investigated the effect of expectation on perceptual sets using the 'ratman' ambiguous figure (figure 1). They wanted to see whether priming participants (i.e. showing participants a series of images that related to the image they are about to see) with a series of pictures prior to presenting an ambiguous image would influence participants to see the ambiguous image (in this case a rat and a man) as one thing or another.

The participants were shown a series of either animal images or images of people prior to seeing the ambiguous image. After the ambiguous image was shown to participants, they were asked to write down what they saw.

A Chi-square statistic was used because the data collected were discrete and dichotomous in nature. Here is an example of the stimuli given:





FIGURE 1 The 'rat-man'.

Although all the participants consented, deception was necessary to avoid demand characteristics. The results indicated that if participants were primed using animal pictures, they were more likely to

A debrief was conducted after the experiment to ensure participants were not psychologically harmed. see the rat in the rat-man picture, and that the opposite was true for participants primed with people's faces prior to seeing the rat-man picture.

The suggested practical here is a slight modification of the original experiment. The participants are not psychology students, as in the original study, but instead require you to recruit participants who do not study psychology.

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OXFORD UNIVERSITY PRE

Expectation and perceptual set



FIGURE 2 Priming images

Aim

The aim of the investigation is to identify whether expectation can affect the perceptual set using the rat-man image. The difference to the original experiment is a change in participants to those who do not have previous knowledge in psychology. This helps eliminate the potential issue of psychology students already knowing about the effect expectation has on our perceptual set.

Materials

- Rat-man image on PowerPoint
- Blank paper for writing response

• Informed consent

- Series of eight images of animals
- Series of eight images of people's faces

Method

- 1 Collect a sample of students (n = 20) from your school to participate in the experiment using convenience sampling. An exclusion criterion is having done psychology before. You may put a notice on a bulletin board to invite participants, or your teachers may assign students for your experiment.
- 2 Ask the student for informed consent (or parental consent if they are under 18 check age requirements with your teacher) and explain to them the details of the study with use of deception.
- 3 Upon agreeing to participate, give the participants a participant number and ask them to use this number on their response sheets.
- 4 Once the participants have consented, randomly allocate half the students to the animal group and the other half to the faces group.
- 5 Allow participants 1 minute to investigate the rat-man image.
- 6 Ask the participants to write down what they see.
- 7 The participants should be debriefed and thanked for their time.
- 8 Once all the data have been collected, inferential statistics can be completed.

Results

Use the table below to collect the data. Create a title for the table. Title:

	Animal	Faces	Total
Rat			
Man			
Total			

l)icri	ICCIUN
	1331011

1 Identify whether the modification made to the redirection. Justify your answer.

2 Explain how deception was necessary in this experiment and describe the importance of debriefing.

3 Using online statistics calculator, calculate the statistical significance of the dataset.

4 State two methodological limitations and suggest an improvement for each.

5 Research a more current example of perceptual set and provide the link below.

1	•			C"		
ha	avnariment was	012	ovtonoion	rotinomont	Or	0
IIC.	EXDELINELL Was	an	CALCHSION	ICHICHICHI	UI.	a

EXAM EXCELLENCE 5

Multiple choice - circle the correct answer

- **1** Define achromotopsia.
 - A a lack of cones in your visual field
 - **B** a lack of rods in your visual field
 - **C** only being able to see in colour
 - **D** only being able to see in grey, black and white
- 2 Identify the term that explains why we still tend to see an object as the same size as it moves farther away.
 - **A** brightness constancy
 - **B** colour constancy
 - **C** shape constancy
 - **D** size constancy
- **3** Deregowski *et al.* (1972) studied the tribes of Africa and found that the people were not always able to distinguish 3D from 2D pictures. Identify the reason for this phenomenon.
 - **A** Figure–ground illusion
 - **B** Lack of depth perception
 - **C** Müller-Lyer illusion
 - **D** Ponzo illusion
- 4 Define the term that means people 'fill in' the missing parts of an incomplete picture.
 - **A** closure
 - **B** figure–ground
 - **C** similarity
 - **D** proximity
- 5 **Identify** the depth cues that depend on the use of two eyes.
 - **A** binocular cues
 - **B** monocular cues
 - **C** retinal disparity
 - **D** linear perspective

Short answer

6 Describe how ageing can affect visual perception.

7 **Describe** linear perspective and draw an example to illustrate your description.

8	Timmy realised at school that he confused
	a Christmas tree. Consider a reason for t

9 Determine the impact of social influences on visual perception. **Use** a study to support your answer.

10 Explain how the Gestalt principle of provisual diagram to support your response.

ed red and green colours when he was drawing a picture of this limitation.

10 Explain how the Gestalt principle of proximity can be used to aid our visual perception. Include a