

Name:
Tutor Group:

IGCSE Psychology Paper 1 Revision & Exam Pack



INTERNATIONAL GCSE PSYCHOLOGY

Paper 1 Cognition and behaviour

Specimen paper

07:00 GMT

Time allowed: 2 hours

Materials

For this paper you may use:

- a calculator

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.

Section A – Memory

Answer **all** questions in the spaces provided.

0 1

Oscar is learning to speak both French and Spanish at school. Sometimes he gets confused and uses French words when he is speaking Spanish.

Which of the following factors best explains the problem Oscar is experiencing?

Shade **one** box.

[1 mark]

A Context

☐

B False memory

☐

C Interference

☐

D Serial position

☐

0 2 . 1

Describe Bartlett's 'War of the Ghosts' study.

[4 marks]

0	2	.	2
---	---	---	---

Explain **one** strength and **one** weakness of the reconstructive theory of memory.

[4 marks]

0	3
---	---

Briefly outline **two** components of the working memory model.

[4 marks]

Using your knowledge of procedural memory, episodic memory and semantic memory, explain Lin's behaviour.

[6 marks]

[illegible]

0	5
---	---

Evaluate the multi-store model of memory

[6 marks]

25

Turn over for the next section

Section B – Perception

Answer **all** questions in the spaces provided.

0 6

Which **two** of the following are binocular depth cues?

Shade **two** boxes.

[2 marks]

A Convergence

☐

B Height in plane

☐

C Linear perspective

☐

D Relative size

☐

E Retinal disparity

☐

0 7

What type of illusion is the visual illusion known as the Kanizsa triangle?

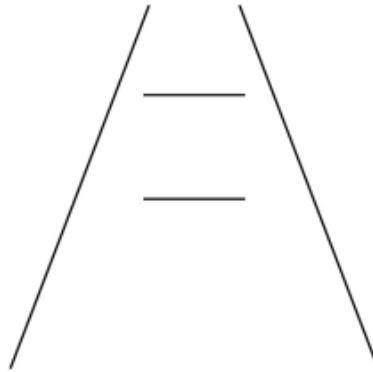
Explain how the Kanizsa triangle illusion works.

[4 marks]

0 8

People often think the two horizontal lines in the Ponzo illusion are different lengths. The horizontal lines are the same length.

Figure 1



The Ponzo illusion

Use your knowledge of Gregory's constructivist theory of perception to explain the Ponzo illusion shown in **Figure 1**.

[4 marks]

09

Read the following information.

A teacher carried out an experiment to investigate factors that can affect perception.

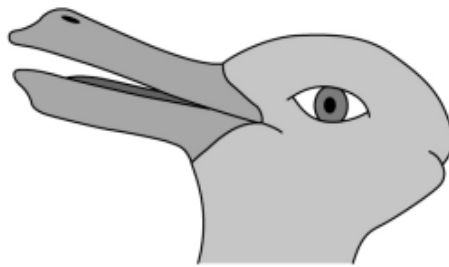
She divided her class into two groups: A and B.

Group A was shown nine different pictures of rabbits.

Group B was shown nine different pictures of ducks.

Both groups were then shown Figure 2 and were asked what animal they saw.

Figure 2



The results are shown in **Table 1**.

Table 1: The type of animal seen by the children after **Figure 1** was shown.

Animal	Group A	Group B
Rabbit	12	2
Duck	3	13

Use your knowledge of **one** factor that affects perception to explain the results shown in **Table 1**.

[3 marks]

[12 marks]

[illegible]

Section C – Biopsychology

Answer **all** questions in the spaces provided.

1	1
---	---

Complete the following sentence.

Shade **one** box only.

Sensory neurons carry information...

[1 mark]

A both to and from the central nervous system.

☐

B from the central nervous system.

☐

C to the central nervous system.

☐

D within the central nervous system.

☐

1	2
---	---

Briefly outline the role of the endocrine system.

[2 marks]

1 3

Read the following information.

Rhys was walking to school on the morning of his psychology examination. He noticed that he was breathing faster than normal and wondered if that was because he was in a hurry, or because he was worried about his examination. As he arrived at school, Rhys saw other students from his class coming along the street. He felt his heart start to beat faster and he started to sweat. However, he tried to look confident by smiling and standing up straight.

From the information, identify **two** examples of functions of the autonomic nervous system and **two** examples of functions of the somatic nervous system.

Write your answers in the correct boxes.

[4 marks]

Autonomic nervous system	Somatic nervous system

1 4

Liana has had a stroke. She now finds she has difficulty moving one side of her body.

Use your knowledge of psychology to name which lobe of Liana's brain a neuropsychologist should investigate.

Explain your answer.

[2 marks]

1 5

Name an appropriate scanning technique that the neuropsychologist could use to investigate Liana's problems.

Justify your answer.

[4 marks]

1 6

Outline possible effects of damage to Broca's area.

[3 marks]

1	7
---	---

Describe and evaluate Hebb's theory of learning and neuronal growth.

[9 marks]

[illegible]

Section D – Research Methods

Answer **all** questions in the spaces provided.

1 8

Which of the following is most likely to provide secondary data?

Shade **one** box.

[1 mark]

A Asking people to complete a questionnaire about their favourite shops

☐

B Collecting information already published by different shops

☐

C Observing people in a shopping centre

☐

D The researcher interviewing people shopping in a supermarket

☐

1 9

Which of the following sets of data is normally distributed?

Shade **one** box.

[1 mark]

A mean = 24 median = 26 mode = 29

☐

B mean = 26 median = 26 mode = 26

☐

C mean = 29 median = 20 mode = 25

☐

D mean = 29 median = 26 mode = 24

☐

2 0

Read the following information:

A researcher wanted to investigate whether the timing of the school day might have an effect on student attendance.

The head teacher at a local school allowed him to carry out an experiment with all 190 Year 9 students over an eight-week period. Year 9 students are 13 – 14 years old.

In the first part of the experiment, the school day began at 8.30 am and finished at 3.30 pm for four weeks (the early start condition).

In the second part of the experiment, the school day began at 10.00 am and finished at 5.00 pm for four weeks (the late start condition).

The researcher recorded the total number of school days missed by Year 9 students during the first and second parts of the experiment.

2 0 . 1

Identify the independent variable in this study.

[1 mark]

2 0 . 2

Identify the dependent variable in this study.

[1 mark]

Question 20 continues on the next page

2 0 . 3

Write a null hypothesis that is suitable for this study.

[2 marks]

Table 2: Total number of days missed by 190 Year 9 students in the early and late start conditions

	Early start condition	Late start condition
Total number of days missed	266	76

2 0 . 4

Table 2 shows the total number of days missed by 190 Year 9 students in the early and late start conditions.

Calculate the mean number of days missed by students in the late start condition.

Show your workings.

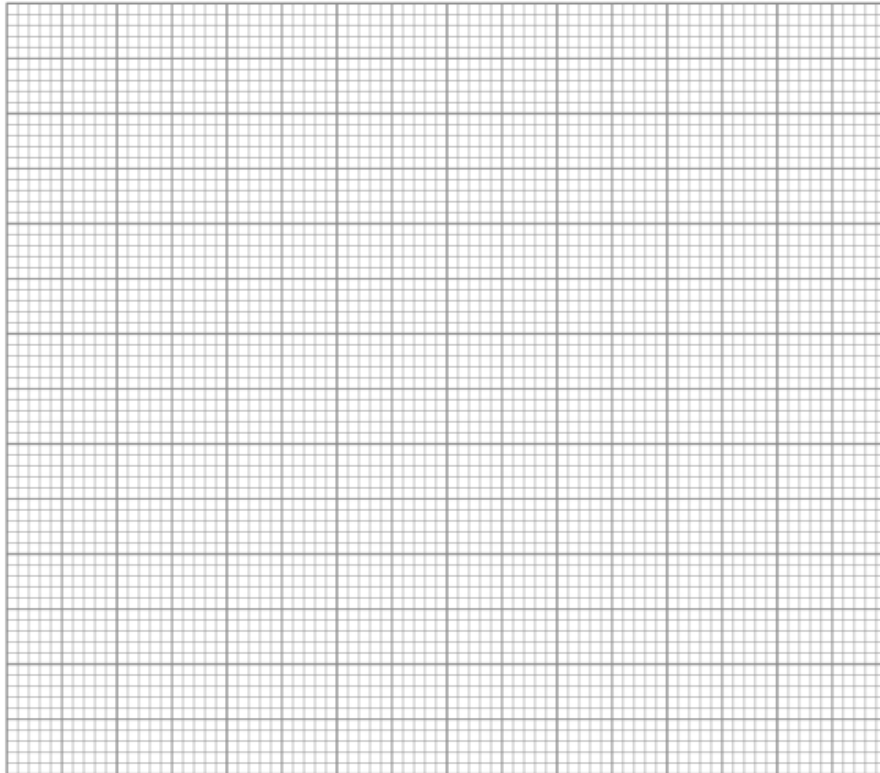
[2 marks]

20.5 The mean for the early start condition was 1.4

Use this mean and your calculated mean from question **20.4** to sketch an appropriate graph to show the mean number of days missed by each student in the early and late start conditions.

Label the axes and provide a suitable title for your graph.

[5 marks]



20.6 What do the results of the study as shown in the graph you have drawn suggest?

[2 marks]

2	0	.	7
---	---	---	---

Explain the experimental design the researcher used in this study.

[2 marks]

2	0	.	8
---	---	---	---

This study is an example of a field experiment.

Explain **one** strength of using a field experiment to investigate student absence.

[2 marks]

2 1

The researcher wanted to interview a sample of the students to find out how they felt about starting school earlier and later in the day.

2 1 . 1

Explain how the researcher could use systematic sampling to get his sample of students

[3 marks]

2 1 . 2

Identify **one** ethical issue the researcher should deal with before interviewing the Year 9 students.

Explain how he could deal with this issue.

[3 marks]

25

END OF QUESTIONS

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INTERNATIONAL GCSE PSYCHOLOGY

9218

Paper 1 Cognition and behaviour

Additional specimen paper

07:00 GMT

Time allowed: 2 hours

Materials

For this paper you must have:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
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- Do all rough work in this answer book. Cross through any work you do not want to be marked.

Information

- The marks for each question are shown in brackets.
- The maximum mark for this paper is 100.

Section A

Memory

Answer **all** questions in this section.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



INCORECT METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



0 1

Which of the following statements is an example of encoding in memory.

Select **one** answer only.

[1 mark]

A Holding information in a memory store

☐

B How much information can be kept in a memory store

☐

C Putting information into a form that can be stored in memory

☐

D Recovering information from storage in memory

☐

Turn over for next question

0 2

Participants in a memory study listened to a recording in which a list of 21 words were heard being read out. As soon as the last word was heard, they were told to write down as many words as they could remember in any order.

The results of the study are shown in **Table 1** below.

Table 1: showing the position of the words on the list and how many words were recalled on average from each position.

	The first 7 words on the list	The middle 7 words on the list	The last 7 words on the list
Mean number of words recalled accurately (out of 7)	3.7	1.1	4.2

Using your knowledge of the effects of serial position on memory, explain the results of this study.

[4 marks]

Turn over for next question

0 3 . 1 What is meant by reconstructive memory?

[2 marks]

0 3 . 2 What is meant by effort after meaning?

[2 marks]

0 3 . 3 Briefly evaluate the theory of reconstructive memory.

[4 marks]

[12 marks]

[illegible]

Section B

Perception

Answer **all** questions in this section.

0 5

Briefly explain the difference between sensation and perception.

[2 marks]

0 6

Decide if the depth cues given below are an example of a monocular cue or a binocular cue.

Tick the correct box next to each cue.

Name of cue	Monocular	Binocular
Convergence		
Occlusion		
Relative size		
Retinal disparity		

[4 marks]

0 7 . 1

What is meant by a visual illusion?

[1 mark]

0 7 . 2 Briefly outline size constancy in perception.

[2 marks]

0 7 . 3 Explain how the Ames Room uses size constancy to affect perception.

[3 marks]

0 8 Explain the role of motion parallax in everyday perception.

[4 marks]

'In our psychology lesson today, the teacher showed us the Ponzo illusion. I really thought that the top line was longer than the bottom line. I had to measure both lines to be sure they were the same length.'

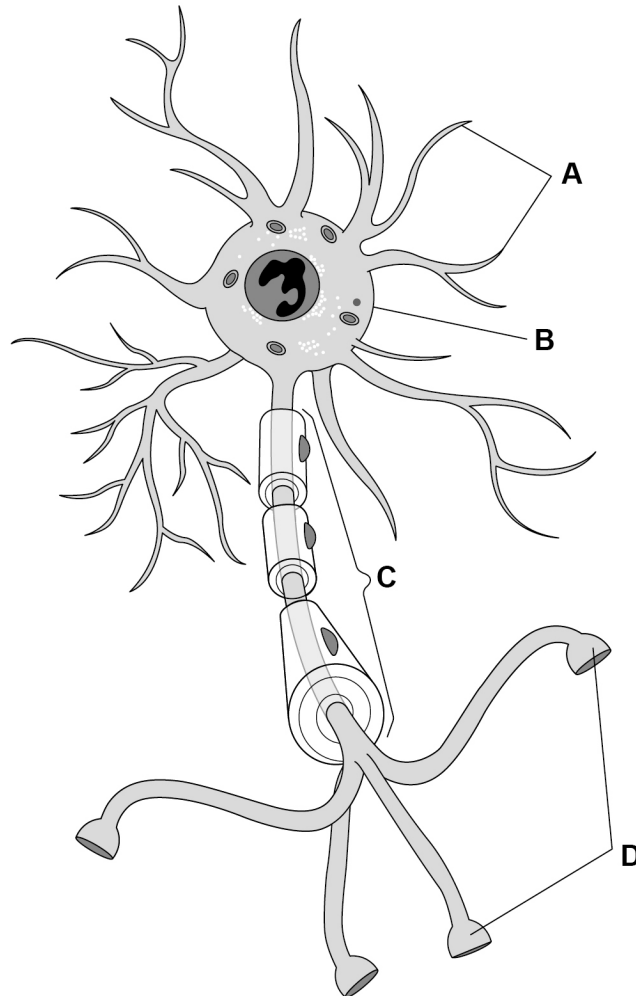
Refer to the comments made by Samil as part of your answer.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Section C

Biopsychology

Answer **all** questions in this section.



In **Figure 1**, four components of a motor neuron have been identified by the letters A, B, C and D.

1 0

Complete the table below with the correct name of the part of a motor neuron in the box next to the appropriate letter.

	Name of part of a motor neuron
A	
B	
C	
D	

[4 marks]

1	1
---	---

Describe the process of synaptic transmission.

As part of your answer refer to **both** excitation and inhibition.

[6 marks]

Turn over for next question

1	2	1
---	---	---

Matti has recently had an accident in his car in which his brain was injured. Matti now has difficulty in understanding what other people are saying when they speak to him.

Use your knowledge of localisation of function to explain Matti's language difficulty after his injury.

[3 marks]

1	2	2
---	---	---

Matti's doctor used an fMRI scan to investigate his language problems.

Briefly evaluate the use of fMRI scans to identify brain functioning.

[3 marks]

Turn over for next question

1	3
---	---

Maiya was walking home from school in the evening. She could hear footsteps behind her. Maiya's breathing became faster and her heart rate increased. She had a dry mouth and started feeling sick.

She then heard a voice shout, '*Maiya, It's me, Danni! Wait for me and we can walk home together.*'

As Maiya turned round and recognised her friend, she began to feel calm and her breathing and heart rate started to slow down.

Use your knowledge of the autonomic nervous system to explain Maiya's behaviour.

[6 marks]

[illegible]

1	4
---	---

Briefly evaluate Penfield's study of the interpretive cortex.

[3 marks]

Section D**Research Methods**

Answer **all** questions in this section.

A psychologist wanted to see if learning is affected by the way the information is presented.

The psychologist prepared two booklets which were like small textbooks. Booklet A contained only written information. Booklet B contained the same written information but there were diagrams and pictures in the content too.

Twenty students, all aged 14 years took part in the study.

Condition 1: Ten students were given Booklet **A**

Condition 2: The other ten students were given Booklet **B**

All the students were told they had 7 days in which to learn the information in their booklet. At the end of the seven days of learning, all the students took the same test.

1	5
---	---

Identify the independent variable in the study.

[1 mark]

1	6
---	---

Identify **one** extraneous variable the psychologist controlled in this study and explain why it was important to control this variable.

[4 marks]

1	7
---	---

Identify and explain the experimental design used in this study.

[3 marks]

Turn over for next question

All the students in this study took the same test on the information they had learned from their booklets.

The results of the study can be seen in **Table 2** below.

Table 2: the mean scores and ranges for Condition1 and Condition 2 in the learning study.

	Condition 1	Condition 2
	Booklet A – only written information	Booklet B – written information with diagrams and pictures
Mean score (out of 100)	63.3	75.6
Range	3	7

1 8

Write the mean score for Condition 2 to 2 significant figures.

[1 mark]

Turn over for next question

1 9

What conclusions might be drawn from the data in Table 2?

Refer to **both** the mean scores **and** the ranges in your answer.

[4 marks]

2 0 . 1

The psychologist used a random sample of students aged 14 years in this study.

What is random sampling?

[1 mark]

2 0 . 2

Explain why this is an appropriate sampling method for this study.

[2 marks]

2	1
---	---

The psychologist was given permission to carry out the study by the Head teacher in a local school.

Identify **one** other group of people who need to give their permission for this study and explain how the psychologist could have dealt with this issue.

[3 marks]

2	2
---	---

The psychologist decided to conduct a follow-up questionnaire study by asking 10 students from the first study about how they usually learned information for tests. The questionnaire contained both open questions and closed questions.

Use your knowledge of research methods to explain:

- why the psychologist might have chosen to use a questionnaire in the follow-up study.
- why the psychologist chose to use both open questions and closed questions in the questionnaire.

[6 marks]

[illegible]

END OF QUESTIONS

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

GCSE PSYCHOLOGY

Paper 1 Cognition and Behaviour

Thursday 21 May 2020

Afternoon

Time allowed: 1 hour 45 minutes

Materials

For this paper you may use:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- Question 19 is a synoptic question in which you will be rewarded for your ability to draw together different areas of knowledge and understanding from across the full course of study.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use

Section	Mark
A	
B	
C	
D	
TOTAL	



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8182/1

Section A

Memory

Answer **all** questions in the spaces provided.

Only **one** answer per question is allowed, except where stated otherwise.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



0 1

Which is the **best** example of information that would be stored as procedural memory?

Shade **one** box.

[1 mark]

A How many millilitres there are in a litre.

☐

B How to play a piece of music on the piano.

☐

C The colours used in the Italian flag.

☐

D What happened on your first day at secondary school.

☐

0 2

Which of the following statements about short-term memory (STM) is true?

Shade **one** box.

[1 mark]

A STM can hold information for up to 30 seconds.

☐

B STM can store approximately 15 pieces of information.

☐

C STM transfers information to long-term memory through attention.

☐

D STM usually encodes information semantically.

☐


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outside the
box**

0	3
---	---

Evaluate the multi-store model of memory.

[5 marks]

[illegible]

Turn over for the next question

Turn over ►



0 3

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outside the
box**

0	4
---	---

Describe Bartlett's 'War of the Ghosts' study.

[4 marks]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

0 4

Read the following information.

The second eyewitness described the robber as being a male with a facial scar, in his late-twenties, wearing a red T-shirt and carrying a knife.

[6 marks]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Turn over for the next question

Turn over ►



0 6Explain **one** weakness of the reconstructive theory of memory.**[2 marks]**



0 6

[illegible]

IB/G/Jun20/8182/1

Section B**Perception**

Answer **all** questions in the spaces provided.

0 8

Which **two** of the following are binocular depth cues?

Shade **two** boxes.

[2 marks]

A Convergence

☐

B Height in plane

☐

C Linear perspective

☐

D Relative size

☐

E Retinal disparity

☐**0 9**

Which is the **best** explanation for the visual illusion known as the Ames room?

Shade **one** box.

[1 mark]

A Ambiguity

☐

B Fiction

☐

C Occlusion

☐

D Size constancy

☐

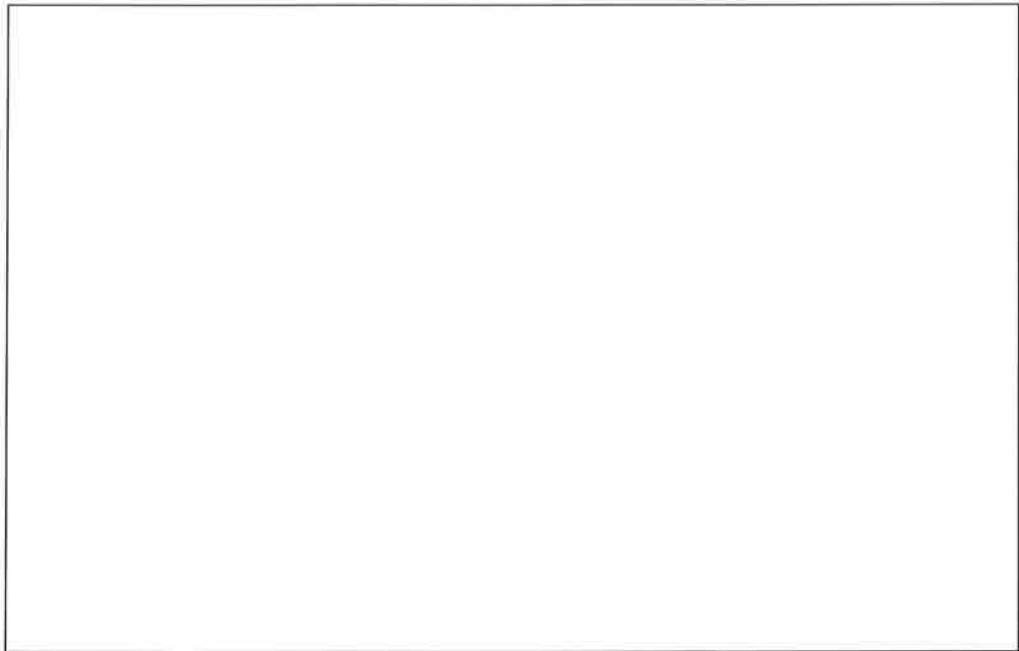
1 0

Briefly evaluate Gibson's direct theory of perception.

[4 marks]

1 1**. 1**

Sketch the Müller-Lyer illusion.

[1 mark]**Turn over ►**

0 9

1 1 . 2

Outline how psychologists would explain the Müller-Lyer illusion.

[3 marks]

1 2

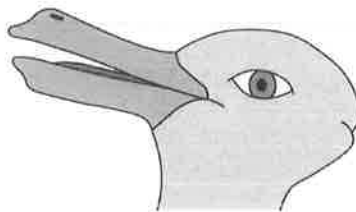
Read the following information.

A teacher carried out an experiment to investigate factors that can affect perception. She divided her class into two groups: A and B.

Group A was shown nine different pictures of rabbits.

Group B was shown nine different pictures of ducks.

Both groups were then shown **Figure 1** and were asked what animal they saw.

Figure 1

The results are shown in **Table 1**.

Table 1: The type of animal seen by participants

Animal	Group A	Group B
Rabbit	11	2
Duck	3	13
Other	1	0



1 2 . 1 Calculate the percentage of students in Group B who saw **Figure 1** as a rabbit.

State your answer using **two** significant figures **and** show your workings.

[3 marks]

Workings:

Answer _____

1 2 . 2 Which of the following is the correct fraction of Group A who saw **Figure 1** as a duck?

Shade **one** box.

[1 mark]

A $\frac{1}{3}$ ☐

B $\frac{1}{4}$ ☐

C $\frac{1}{5}$ ☐

D $\frac{1}{6}$ ☐

Question 12 continues on the next page

Turn over ►



*Do not write
outside the
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1	2	.	3
---	---	---	---

Use your knowledge of **one** factor that affects perception to explain the results shown in **Table 1** (on page 10).

[4 marks]

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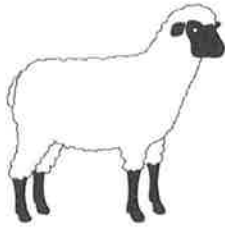
1	3
---	---

A psychologist carried out a laboratory experiment to see whether or not culture affects perception. He asked Marc and José to look at the three images shown in **Figure 2** and decide which image was the odd one out.

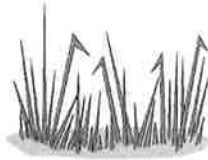
Marc was brought up on a farm and still lives in a rural part of France. Marc said, "The cat is the odd one out. The sheep and the grass go together best because sheep eat grass."

José was brought up in the Spanish city where he still lives. "No!" said José, "it's the grass. The cat and the sheep go together best because they are both animals."

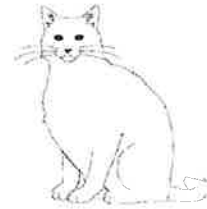
Figure 2



Sheep



Grass



Cat

Outline how culture can affect perception. Refer to **both** Marc and José's comments in your answer.

[4 marks]

[illegible]

Turn over ►



1	4
---	---

Explain **one** strength of using laboratory experiments in research.

[2 marks]

25



1 4

Section C**Development**

Answer **all** questions in the spaces provided.

1 5

Sienna is planning her holiday. Which part of the brain plays a key role in this activity?

Shade **one** box only.

[1 mark]**A** Brain stem☐**B** Cerebellum☐**C** Cortex☐**D** Thalamus☐**1 6**

Matt is looking at a drawing of how castles were designed. Which **one** of the following learning styles is he using?

Shade **one** box only.

[1 mark]**A** Fixed☐**B** Growth☐**C** Verbaliser☐**D** Visualiser☐

Turn over for the next question

Turn over ►

1 7

According to Piaget's theory of cognitive development, during which stage will a child first start to look for something that has been hidden from view?

Shade **one** box only.

[1 mark]

A Concrete operational

☐

B Formal operational

☐

C Pre-operational

☐

D Sensorimotor

☐
1 8

Two teachers are having a conversation about a student.

Mr Taylor: "I am really worried about Jana. She is not enthusiastic about learning during lessons and does not complete her homework. Her test scores are getting worse. What can I do to help her?"

Mr Rogers: "Maybe you need to increase Jana's level of self-efficacy."

1 8 . 1

Outline **one** example of how Mr Taylor can use praise to improve Jana's learning.

[2 marks]

1 8 . 2

Outline **one** example of how Mr Taylor can increase Jana's self-efficacy.

[2 marks]



Read the following information.

Kyle: "I am disappointed too but everyone gets rejected sometimes. The coach says I need to improve my fitness level so I am going to start running twice a week. Perhaps I will be selected next time."

Briefly evaluate **both** negative schemas as an explanation for depression **and** Dweck's Mindset theory.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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outside the
box*



Do not write
outside the
box

2	0
---	---

Hughes investigated egocentrism in his 'policeman doll study'. Describe this study.

[4 marks]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Turn over for the next question

Turn over ►



Do not write
outside the
box

2	1
---	---

Evaluate Hughes' 'policeman doll study'

[5 marks]

25



Section D**Research Methods**

Answer **all** questions in the spaces provided.

2 2

Which **two** of the following are commonly understood to be advantages of case studies?

Shade **two** boxes.

[2 marks]

- A The conclusions drawn are objective.
- B The findings can be easily generalised to the behaviour of other people.
- C They are easy for others to replicate.
- D They can be used to study rare and unusual behaviours.
- E They provide rich and detailed information.

☐☐☐☐☐**2 3**

Which **one** of the following statistics is calculated by finding the difference between the smallest and largest values in a set of data?

Shade **one** box only.

[1 mark]

- A Mean
- B Median
- C Mode
- D Range

☐☐☐☐

Turn over for the next question

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Outline what is meant by independent groups and repeated measures.

Discuss the strengths and weaknesses of **both** of these types of experimental design. **[9 marks]**

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2 5

Read the following information.

A researcher wanted to investigate whether physical exercise affected the mental well-being of firefighters.

He used stratified sampling to select 10 participants from a local fire department. He asked each participant to keep a diary for one month. Participants were asked to record the amount of exercise they completed each day. They were also asked to record a daily mental well-being score using the scale shown in **Table 2**.

Table 2: Mental well-being rating scale

Over the past day	All of the time	Often	Some of the time	Rarely	None of the time
I have felt confident.	5	4	3	2	1
I have felt relaxed.	5	4	3	2	1
I have dealt with problems well.	5	4	3	2	1
I have felt cheerful.	5	4	3	2	1

Total score: _____

2 5**. 1**Outline **one** strength of using a stratified sample when conducting research.**[2 marks]**

2 5**. 2**Give a definition of **both** qualitative **and** quantitative data.**[2 marks]**

Qualitative data _____

Quantitative data _____



2 5 . 3

When collecting information about mental well-being, explain why collecting qualitative data rather than quantitative data may increase the validity of the data collected by the researcher.

[2 marks]

Question 25 continues on the next page

Turn over ►

2 5

2 5 . 4 Read the following information.

At the end of the month, the researcher analysed the diaries completed by participants. He calculated the average number of minutes each participant exercised daily and the average mental well-being score for each participant for the whole month. The results are shown in **Table 3**.

Table 3: The average daily exercise and mental well-being score for each participant

Participant number	Average daily exercise (minutes)	Average mental well-being score
1	30	14
2	12	11
3	5	8
4	2	7
5	8	10
6	14	10
7	30	12
8	15	11
9	28	15
10	45	15

Identify the mode for the average daily exercise scores shown in **Table 3**.

[1 mark]

Mode for average daily exercise = _____

2 5 . 5 Calculate the median for the average mental well-being scores shown in **Table 3**.

[1 mark]

Median for average daily exercise = _____

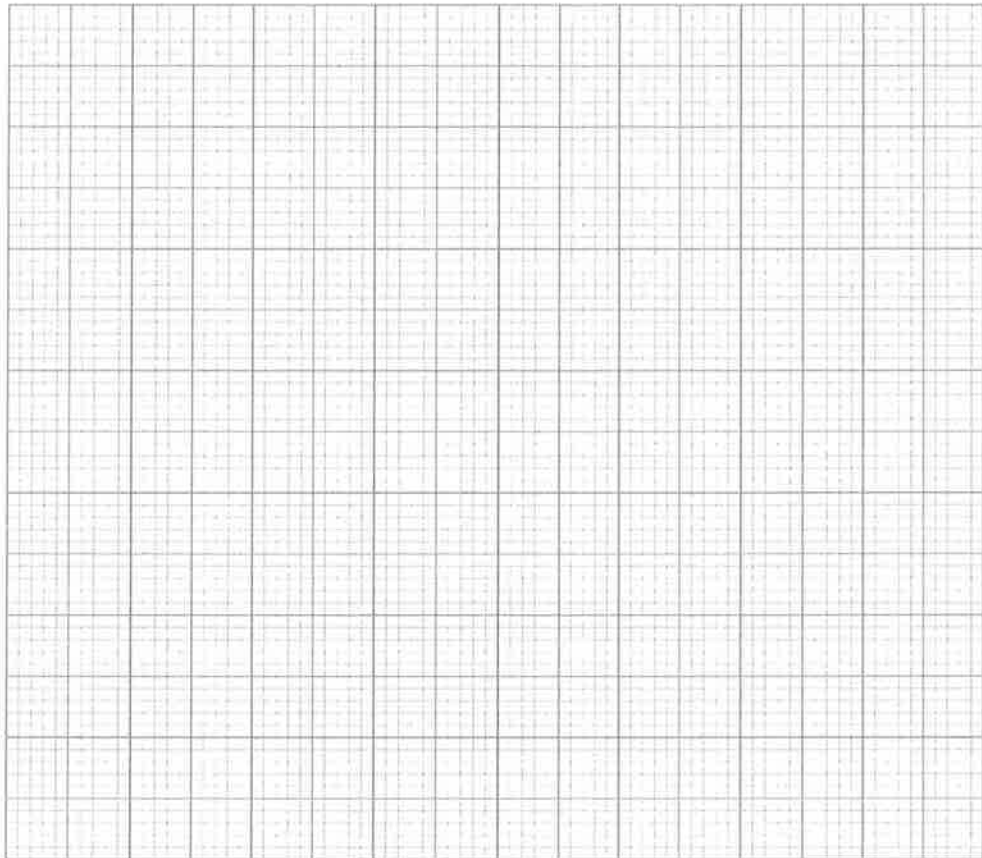


2 5 . 6

Use the graph paper to sketch a scatter diagram to show the results shown in Table 3.

Provide a suitable title and labels for your diagram.

[4 marks]



2 5 . 7

Identify the type of correlation the researcher has found between exercise and mental well-being.

Shade **one** box only.

[1 mark]

A Negative correlation

☐

B No correlation

☐

C Perfect correlation

☐

D Positive correlation

☐

25

END OF QUESTIONS



2 7

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2 8

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[illegible]

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1B/G/Jun20/6182/1

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Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

GCSE PSYCHOLOGY

Paper 1 Cognition and Behaviour

Time allowed: 1 hour 45 minutes

Materials

For this paper you may use:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- Question 12 is a synoptic question in which you will be rewarded for your ability to draw together different areas of knowledge and understanding from across the full course of study.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
D	
TOTAL	



J U N 2 1 8 1 8 2 1 0 1

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8182/1

Section A**Memory**

Answer **all** questions in the spaces provided.

Only **one** answer per question is allowed, except where stated otherwise.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



0 1

Oscar is learning both French and Spanish at school. Sometimes he gets confused and uses French words when he is speaking Spanish.

Which of the following factors best explains the problem Oscar is experiencing?

Shade **one** box.

[1 mark]

A Context

☐

B False memory

☐

C Interference

☐

D Serial position

☐


0	2
---	---

What is meant by 'storage' as a process of memory?

[2 marks]

Turn over for the next question

Turn over ►



0 3

Read the following information.

Yasir: "I will draw pictures and diagrams of what I need to learn. This helps me to remember information."

[4 marks]

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[9 marks]

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[5 marks]

[illegible]

0 6

Read the following information.

A researcher carried out a study into false memory. Each participant was shown five photos and asked what they remembered about these events from their childhood.

However, only four of these photos showed a genuine event from their childhood. The other photo showed a fake image of the participant on a hot air balloon ride. None of the participants had ever experienced a hot air balloon ride.

0 6

1

Calculate what fraction of the photos shown to each participant were fake.

[1 mark]

0 6

2

The researcher had to choose the order in which to show a set of five photos.

Describe how the researcher could have used randomisation to decide the order.

[3 marks]

25



0 8

Section B**Perception**

Answer **all** questions in the spaces provided.

0 7

Objects that are closer in your visual field appear larger than those that are further away.

Which **one** of the following causes this?

Shade **one** box.

[1 mark]**A** Convergence
☐
B Height in plane
☐
C Linear perspective
☐
D Occlusion
☐
E Relative size
☐
0 8

Objects that are closer in your visual field can cover part of another object that is further away.

Which **one** of the following causes this?

Shade **one** box.

[1 mark]**A** Convergence
☐
B Height in plane
☐
C Linear perspective
☐
D Occlusion
☐
E Relative size
☐
Turn over ►

0 9

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What is meant by perception?

[2 marks]



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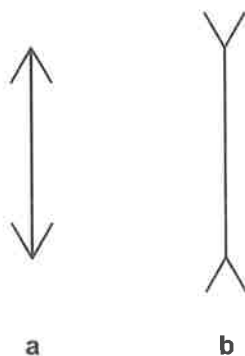
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1 1

Figure 1: The Müller-Lyer illusion

1 0

Read the following information.

Figure 1 shows the Müller-Lyer illusion. The two vertical lines labelled **a** and **b** are the same length but sometimes people incorrectly perceive that line **b** is longer than line **a**.

A psychologist investigated whether the environment in which people lived affected how they perceived the Müller-Lyer illusion. He tested two groups of participants; there were 50 participants in each group.

Group 1 lived in a city environment so were used to seeing square buildings around them. Group 2 lived in a rainforest environment so were not used to seeing square buildings around them.

He asked each participant if the two vertical lines were the same length.

The results of the study are shown in **Table 1**.

Table 1: The number of participants in each group who incorrectly perceived the Müller-Lyer illusion.

Group 1	Group 2
27	18



1 0 . 1

Calculate the percentage of participants in **Group 2** who incorrectly perceived the Müller-Lyer illusion.

State your answer rounded to **one** significant figure. Show your workings.

[3 marks]

Workings:

Answer _____

1 0 . 2

What is the ratio of participants who incorrectly perceived the Müller-Lyer illusion in Group 1 compared to Group 2?

Write this ratio in its simplest form.

[2 marks]

Question 10 continues on the next page

Turn over ►



1 3

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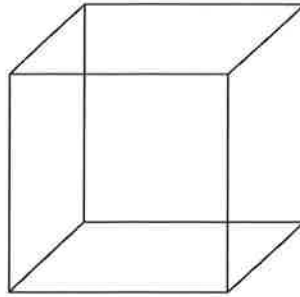
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Outline **one** conclusion about the participants' perception of the Müller-Lyer illusion that the researcher could draw from his results.

How can this conclusion be explained using Gregory's constructivist theory of perception?

[4 marks]

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Figure 2: The Necker cube illusion

1	1
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Figure 2 shows the Necker cube illusion.

Outline how psychologists would explain the Necker cube illusion.

[3 marks]

Turn over for the next question

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1 5

[9 marks]

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Section C**Development**

Answer **all** questions in the spaces provided.

1 3

Research suggests that nature plays a role in early brain development.

Which of the following is a way that nature can affect brain development?

Shade **one** box only.

[1 mark]

A Experiences with other people

☐

B Genes

☐

C Getting an infection

☐

D Neglect

☐**1 4**

Which of the following **best** describes the function of the cortex?

Shade **one** box only.

[1 mark]

A Controls basic autonomic functions

☐

B Controls cognitive processes

☐

C Coordinates movement and balance

☐

D Passes on information from the sense organs

☐

Read the following information.

Her dad explains, "Actually it is a donkey, Megan. Although it looks very similar to a horse, a donkey has a thicker coat, longer ears and a shorter tail than a horse."

[4 marks]

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Read the following information.

Briefly describe Piaget's concept of conservation.

Refer to Ibrahim in your answer.

[4 marks]

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[6 marks]

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Turn over ►



You have been asked to compare the effects of using different learning styles to revise the structure of the brain. Describe how you would design an experiment to do this.

- the tasks participants would be asked to do to revise the structure of the brain using a verbaliser **and** a visualiser learning style
- one example of a standardised procedure that you would use **and** a justification for why this should be used
- one ethical consideration you would need to address **and** how you would deal with this.

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1	9
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Willingham has criticised the use of learning styles.

Briefly outline his criticism of learning styles.

[3 marks]

25

Turn over for the next section

Turn over ►



2 3

Section D

Research Methods

Answer **all** questions in the spaces provided.**2 0**Which of the following is **most likely** to give secondary data?Shade **one** box.**[1 mark]**

- A** Asking participants to complete a questionnaire about their favourite shops
- B** Collecting information already published by high street retailers
- C** The researcher interviewing shoppers in a supermarket
- D** The researcher observing participants in a shopping centre

☐☐☐☐**2 1**

Which of the following sets of data is normally distributed?

Shade **one** box only.**[1 mark]**

- A** mean = 24 median = 26 mode = 29
- B** mean = 26 median = 26 mode = 26
- C** mean = 29 median = 20 mode = 25
- D** mean = 29 median = 26 mode = 24

☐☐☐☐

2 2

Read the following information.

A researcher wanted to investigate whether the timing of the school day affected student attendance. The head teacher at a local school allowed him to carry out an experiment with all 190 Year 9 students over an eight-week period.

In the first part of the experiment, the school day began at 8.30 am and finished at 3.30 pm for four weeks (the early start condition).

In the second part of the experiment, the school day began at 10.00 am and finished at 5.00 pm for four weeks (the late start condition).

The researcher recorded the total number of school days missed for Year 9 students during the first and second parts of the experiment.

2 2**1**

Identify the independent variable in this experiment.

[1 mark]

2 2**2**

Identify the dependent variable in this experiment.

[1 mark]

2 2**3**

Write a null hypothesis that the researcher can use in this experiment.

[2 marks]

Question 22 continues on the next page**Turn over ►**

2 5

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Table 2: Total number of days missed by 190 Year 9 students in the early and late start conditions.

	Early start condition	Late start condition
Total number of days missed	266	76

2 2 . 4

Table 2 shows the total number of days missed by 190 Year 9 students in the early and late start conditions.

Calculate the **mean** number of days missed by students in the late start condition.

Show your workings.

[2 marks]

Workings:

Answer _____

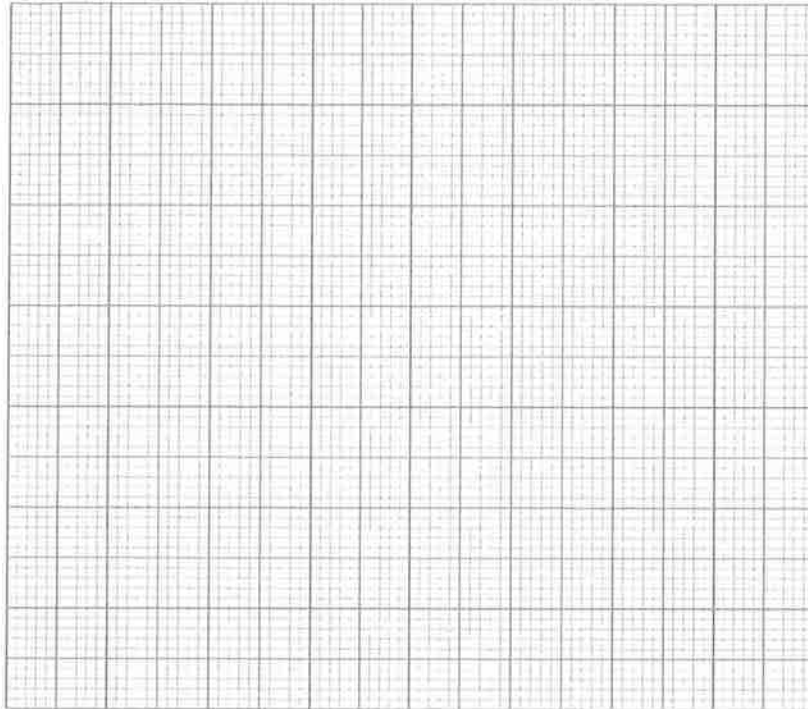


2 2 . 5 The mean for the early start condition was 1.4

Use this mean and your calculated mean from question 22.4 to sketch a suitable graph to show the mean number of days missed by each student in the early and late start conditions.

Label the axes and provide a suitable title for your graph.

[4 marks]



2 2 . 6 The researcher used a repeated measures experimental design. He also used counterbalancing.

Explain why researchers often use counterbalancing with a repeated measures experimental design.

[2 marks]

Question 22 continues on the next page

Turn over ►



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2 2 . 7 This study is an example of a field experiment.

Evaluate the use of field experiments in psychological research.

[5 marks]

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2 2 . 8 The psychologist wanted to interview a sample of the students in his experiment to find out how they felt about starting school earlier and later in the day. He thought about using either opportunity or systematic sampling to get his sample of students.

Outline **both** opportunity **and** systematic sampling.

Compare the use of these sampling methods using your knowledge of their strengths **and/or** weaknesses.

[6 marks]

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END OF QUESTIONS



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3 1

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[illegible]

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Candidate number

Surname _____

Forename(s) _____

Candidate signature _____

I declare this is my own work.

GCSE PSYCHOLOGY

Paper 1 Cognition and Behaviour

Time allowed: 1 hour 45 minutes

Materials

For this paper you may use:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- Question 11 is a synoptic question in which you will be rewarded for your ability to draw together different areas of knowledge and understanding from across the full course of study.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
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TOTAL	



J U N 2 2 8 1 8 2 1 0 1

Section A**Memory**

Answer **all** questions in the spaces provided.

Only **one** answer per question is allowed, except where stated otherwise.

For each answer completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



0 1

Which **two** of the following statements about the reconstructive theory of memory are correct?

Shade **two** boxes.

[2 marks]

A Cultural and social expectations will not affect recall.

☐

B Information flows through sensory, short-term and long-term memory.

☐

C Memory involves effort after meaning.

☐

D Memory is like a video recording.

☐

E The way we store and recall information is an active process.

☐


0	2
---	---

Briefly evaluate the reconstructive theory of memory.

[2 marks]

Turn over for the next question

Turn over ►



0 3

Read the following article.

TJ had a cycling accident which caused brain damage. He now suffers from some memory loss. He cannot recall what he ate or was wearing the day before. He remembers that London is the capital of England and that the Eiffel Tower is in Paris. TJ has also not forgotten how to play the piano and he can still ride his bike.

0 3 . 1

Use the article to identify **two** examples of procedural memory, **two** examples of semantic memory and **two** examples of episodic memory.

Write your answers in the correct boxes.

[6 marks]

	Procedural memory	Semantic memory	Episodic memory
Example 1			
Example 2			



0 3 . 2

Psychologists sometimes study unique individuals like TJ using a case study.

Briefly evaluate the use of case studies in psychological research.

[3 marks]

Turn over for the next question

Turn over ►



You have been asked to investigate the effect of interference on the accuracy of memory.

You need to include:

- [6 marks]**

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0	5
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Murdock investigated the effects of serial position on recall.

Describe **and** evaluate this study.

[6 marks]

Extra space _____

25

Turn over ►



Section B**Perception**

Answer **all** questions in the spaces provided.

0	6
---	---

Gilchrist and Nesberg investigated the effect of motivation on perception.

Which **two** of the following statements about their study are correct?

Shade **two** boxes.

[2 marks]

- A** The control group perceived images of food to be brighter than the food-deprived group.
- B** The independent variable was whether participants were deprived of food or not.
- C** The participants were shown slides of four different meals.
- D** The study used a repeated measures design.
- E** The study was a field experiment.

☐☐☐☐☐

0	7
---	---

Which **one** of the following is a description of occlusion?

Shade **one** box.

[1 mark]

- A** Distant objects are seen or shown as being higher in the visual field compared to items that are nearer. ☐
- B** The larger objects in the visual field appear to be closer than the smaller objects. ☐
- C** Where an object covers part of another object in the visual field, it appears to be closer. ☐
- D** Where parallel lines appear to meet in the visual field, they are seen to be further away. ☐

Turn over for the next question

Turn over ►



0 8

Read the following information.

A researcher investigated the effect of emotion on perception. She used two groups of participants.

Participants in Group A had been identified as having a mild fear of spiders. Participants in Group B did not have a fear of spiders.

She showed each participant a photo of a spider. Then she asked them to estimate the length of the spider. She recorded the estimated length of the spider for each participant.

The estimated length of the spider, in millimetres, for each participant in Group A and Group B is shown in **Table 1**.

Table 1 The estimated length of the spider, in millimetres, for each participant in Group A and Group B.

Participant	Group A: mild fear of spiders	Participant	Group B: no fear of spiders
1	65	11	62
2	72	12	80
3	80	13	88
4	59	14	79
5	161	15	82
6	102	16	75
7	75	17	105
8	130	18	79
9	96	19	92
10	90	20	64
Total	930	Total	806



0 8 . 1

The range of estimated lengths for the spider for participants in Group B was 43 mm.

Use the information in **Table 1** to calculate the range of estimates for participants in Group A.

Show your workings.

[2 marks]

Workings:

Range of estimates for participants in Group A _____ mm

0 8 . 2

The mean estimated length of the spider in Group A was 93 mm.

Use the information in **Table 1** to calculate the mean estimated length of the spider in Group B.

State your answer using **two** significant figures **and** show your workings.

[3 marks]

Workings:

Mean estimated length of the spider in Group B _____ mm

Turn over ►



Read the following information.

[4 marks]

Extra space



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Describe Gregory's constructivist theory of perception.

[4 marks]

Extra space

Turn over for the next question**Turn over ►**

[9 marks]



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Extra space

25

Turn over ►



Section C**Development**

Answer **all** questions in the spaces provided.

1 2

Which **one** of the following is an example of a visualiser learning style?

Shade **one** box.

[1 mark]

A Drawing a diagram

☐

B Listening to a podcast

☐

C Talking about an idea

☐

D Writing a list of key terms

☐**1 3**

What is meant by 'praise' in the context of learning?

[2 marks]

1 4

50 teachers were asked whether they were more likely to praise student effort or student performance.

37 of these teachers said they were more likely to praise student effort.

Calculate the fraction of teachers who were more likely to praise student performance.

[1 mark]



Read the following information.

"The mother's genes play a key role," says Doctor Kumar.

"I agree," replies Doctor Andersson, "but the quality of a mother's diet during pregnancy also affects how the brain develops. A healthy balanced diet is very important."

Explain the role of nature **and** nurture on the brain development of a baby before it is born.

Refer to Doctor Kumar's **and** Doctor Andersson's comments in your answer. **[6 marks]**

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1	6
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Describe **and** evaluate the 'policeman doll study' carried out by Hughes.

[6 marks]

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Extra space

[illegible]

Read the following information.

Bravas places a higher value on the hard work of employees and only recruits people who show willingness to develop new skills. It encourages risk taking, and employees who work in Bravas say they enjoy challenges.

In your answer, refer to the mindset encouraged by **both** restaurant businesses in this information.

[9 marks]

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Section D**Research Methods**

Answer **all** questions in the spaces provided.

1 8

Which **one** of the following is a feature of an interview?

Shade **one** box.

[1 mark]

A Changing an independent variable in a controlled environment

☐

B Directly asking people questions

☐

C Investigating a specific group in depth

☐

D Watching the behaviour of a group of people

☐**1 9**

Which **one** of the following is most likely to achieve a representative sample?

Shade **one** box.

[1 mark]

A Opportunity

☐

B Random

☐

C Stratified

☐

D Systematic

☐

Turn over for the next question

Turn over ►



2	0
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Name the descriptive statistic that is calculated by ordering the values in a set of data then selecting the middle value.

[1 mark]

2	1
---	---

Define what is meant by 'secondary data'.

[2 marks]



2 2

Read the following information.

A psychologist investigated whether an environmental cue could influence participant behaviour.

The environmental cue he used was smell.

He asked 60 participants to sit at a desk and complete a questionnaire. When they had completed the questionnaire, he gave each of them a doughnut as a reward.

30 of the participants completed the questionnaire in a room that smelled of cleaning product (the smell group). The other 30 participants completed the questionnaire in a room that did not smell of cleaning product (the no smell group).

The psychologist recorded whether each participant cleaned their desk after eating their doughnut.

2 2 . 1

Identify the dependent variable **and** both conditions of the independent variable in this experiment.

Write your answers in the correct spaces provided.

[3 marks]

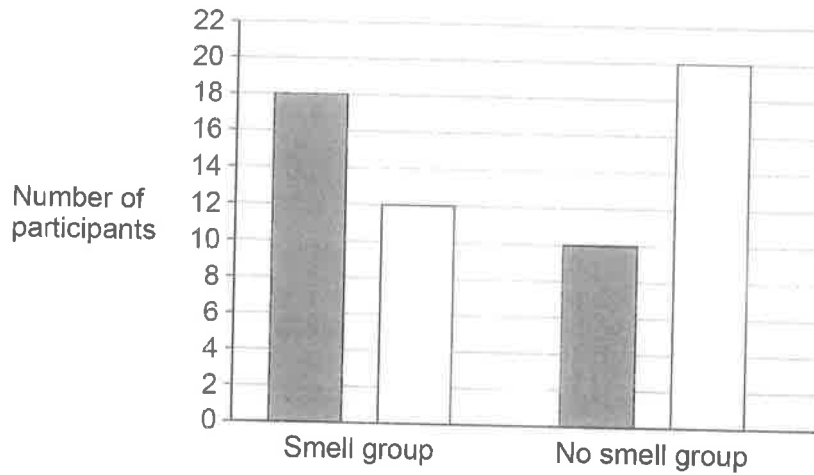
Dependent variable _____

Independent variable _____

Question 22 continues on the next page

Turn over ►

Figure 1 Bar chart to show the number of participants who did and did not clean their desk in the smell and no smell groups.



Key

- Number of participants who cleaned their desk
□ Number of participants who did not clean their desk

2 2 . 2 The results of this experiment are shown in **Figure 1**.

Use this information to complete the table below.

[2 marks]

	Smell group	No smell group
Number of participants who cleaned their desk	18	
Number of participants who did not clean their desk	12	



2 2 . 3 33.3% of participants cleaned their desk in the no smell group.

Calculate the percentage of participants who cleaned their desk in the smell group.

Use the information from **Question 22.2**.

Show your workings.

[2 marks]

Workings:

_____ %

2 2 . 4 State whether the environmental cue of smell did or did not influence participant behaviour in this experiment.

Use the data in **Figure 1** to explain your answer.

[3 marks]

Turn over ►



2 2 . 5 Name the experimental design used by the psychologist in this study.

Explain your answer.

[2 marks]

Experimental design _____

Explain your answer _____

2 2 . 6 Explain **one** weakness of using the experimental design you named in **Question 22.5**.
[2 marks]



Please write clearly in block capitals.

Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

GCSE PSYCHOLOGY

Paper 1 Cognition and Behaviour

Friday 19 May 2023

Afternoon

Time allowed: 1 hour 45 minutes

Materials

For this paper you may use:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- Question 18 is a synoptic question in which you will be rewarded for your ability to draw together different areas of knowledge and understanding from across the full course of study.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use

Section	Mark
A	
B	
C	
D	
TOTAL	



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IB/G/Jun23/E8

8182/1

Section A**Memory**

Answer **all** questions in the spaces provided.

Only **one** answer per question is allowed, except where stated otherwise.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



0 1

Which of the following describes semantic memory?

Shade **one** box.

[1 mark]

- A** It contains events that have occurred in our lives ☐
- B** It helps us carry out physical actions ☐
- C** It retains information for approximately 30 seconds ☐
- D** It stores facts about general knowledge and meanings ☐

0 2

Which of the following is the correct definition of a 'false memory'?

Shade **one** box.

[1 mark]

- A** A feeling that we have experienced something similar before ☐
- B** A memory for something that didn't happen but feels true ☐
- C** Not being able to remember the correct answer to a question ☐
- D** The confusion between two similar memories ☐



0 3

What is meant by 'encoding' as a process of memory?

[2 marks]

Turn over for the next question**Turn over ►**

[6 marks]

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be from a notebook or a standard sheet of stationery. There is no handwriting or other markings on the page.

0 4 . 2

The researcher considered different experimental designs when planning her experiment.

Identify **and** explain **one** strength and **one** weakness of an independent groups design.

Write your answers in the correct spaces provided.

[4 marks]

Strength _____

Weakness _____

Turn over for the next question

Turn over ►



0 5**Evaluate the multi-store model of memory.****[4 marks]**

0 6**Describe the method used by Bartlett in his 'War of the Ghosts' study.****[3 marks]**



IB/G/Jun23/8182/1

Section B**Perception**

Answer **all** questions in the spaces provided.

0 8

'Fiction' is one explanation for why people see visual illusions.

Which of the following visual illusions is an example of fiction?

Shade **one** box.

[1 mark]

A The Ames room

☐

B The Kanizsa triangle

☐

C The Müller-Lyer

☐

D The Necker cube

☐

0 9

Kishan is studying Food Preparation and Nutrition at school. During one of his lessons, he is asked to close his eyes and taste different foods. He then has to guess what the foods are. He thinks that one of them is very familiar and correctly recognises it as strawberry yoghurt.

State whether Kishan is experiencing sensation **or** perception when he correctly recognises the strawberry yoghurt.

Explain your answer.

[2 marks]

Sensation **or** perception _____

Explanation _____



[9 marks]

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1	1
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Bruner and Minturn investigated the effect of expectation on perception.

Describe Bruner and Minturn's study.

[4 marks]

Turn over for the next question

Turn over ►



1 0 . 4

The researcher found that participants in **Condition B** reported the water felt warmer than participants in **Condition A**.

Using your knowledge of 'perceptual set', outline **one** conclusion that the researcher could make from these findings.

[2 marks]



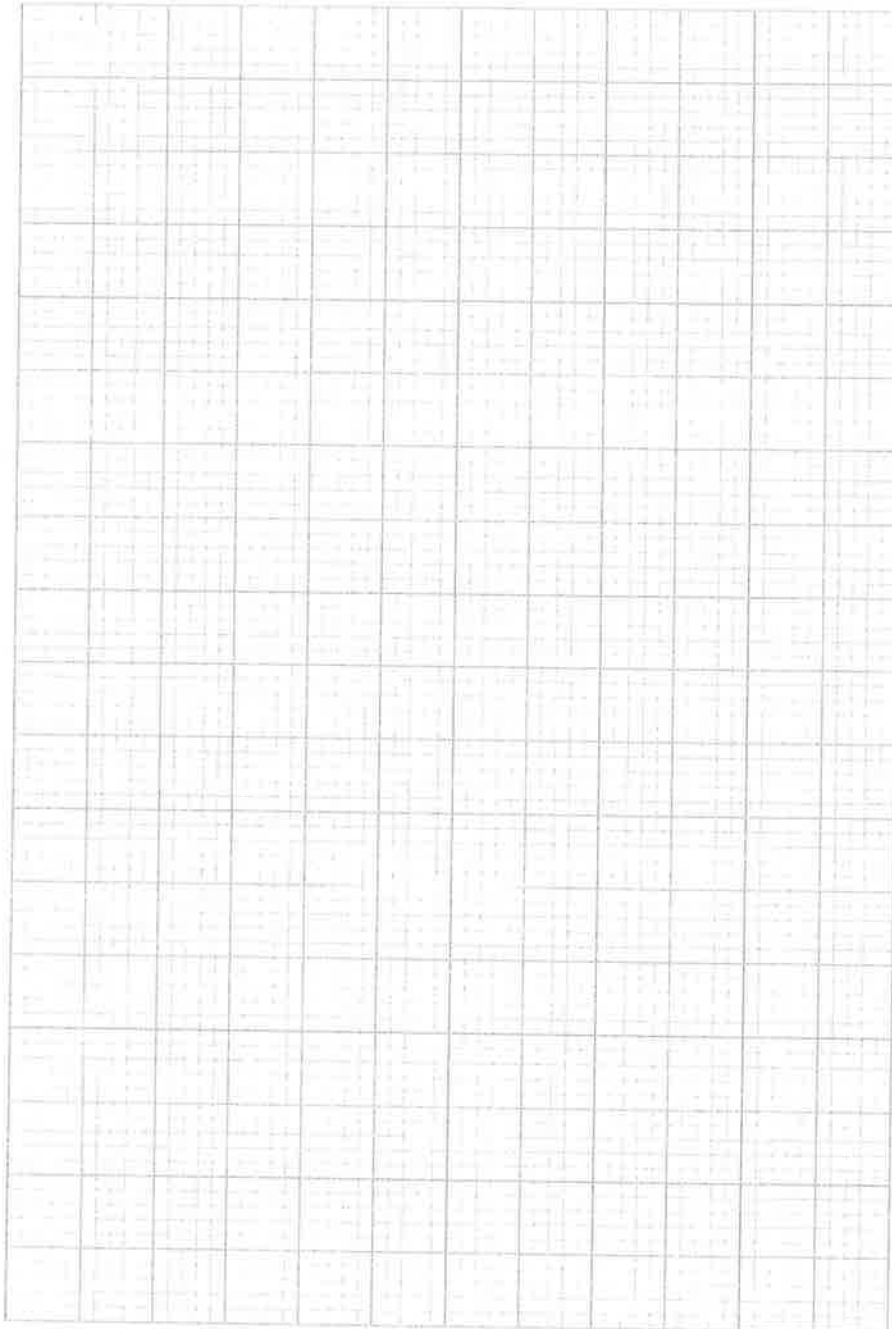
1 0 . 3 Sketch a histogram to show the results in **Table 1**.

Include the number of participants you wrote in answer to Question **10.2**.

Provide a suitable title and labels for your histogram.

[4 marks]

Title _____



Turn over ►



Table 1 shows the frequency of reported temperature scores for **Condition A**. One of the scores is missing.

Table 1

Reported temperature score	Frequency
1–5	6
6–10	
11–15	16
16–20	1
21–25	2
26–30	0
31–35	2
36–40	1
41–45	0
46–50	1

1 0 . 1 Name the type of data that is shown in **Table 1**.

[1 mark]

1 0 . 2 Calculate the number of participants who reported a temperature score between 6 and 10.

Show your workings.

[2 marks]

Workings:

Number of participants _____



1 0

Read the following article.

In a study investigating perceptual set, 40 participants were asked to place their hand in a bucket of water for 10 seconds whilst listening to music. The temperature of the water was the same for each participant.

They were asked to give a number between 1 and 50 to report how warm they thought the water was.

A score of 1 meant the water felt extremely cold. A score of 50 meant that the water felt extremely hot.

There were two conditions of the experiment. All participants completed both conditions.

In **Condition A**, participants listened to a famous song that is associated with winter and Christmas.

In **Condition B**, participants listened to a famous song that is associated with summer and the sunshine.

Question 10 continues on the next page

Turn over ►



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25

Turn over ►



Section C**Development**

Answer **all** questions in the spaces provided.

1 3

Which of the following is a small structure at the base of the brain that coordinates movement and balance?

Shade **one** box.

[1 mark]

A Brain stem ☐

B Cerebellum ☐

C Cortex ☐

D Thalamus ☐

1 4

Which of the following is a true statement about people who have a growth mindset?

Shade **one** box.

[1 mark]

A They avoid challenges ☐

B They believe ability will improve with practice ☐

C They feel threatened by the success of others ☐

D They ignore negative criticism that is useful ☐



1 5

Read the following information.

You have been asked to design an experiment to investigate whether having a fixed mindset or a growth mindset will affect students' performance in their end of year exams.

1 5 . 1

Identify what the independent variable and dependent variable would be in your experiment.

Write your answers in the correct spaces provided.

[2 marks]

Independent variable _____

Dependent variable _____

1 5 . 2

The target population for your experiment is Year 8 students at a local school.

There are 100 Year 8 students at this school.

Describe how you could select 20 participants for your experiment using random sampling.

[3 marks]

Turn over ►

1	6
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Piaget's stage theory describes cognitive development.

Briefly outline the sensorimotor stage **and** the formal operational stage.

[4 marks]



[5 marks]

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Turn over ►



McGarrigle and Donaldson investigated the development of conservation in the 'naughty teddy study'.

Evaluate the research method used in McGarrigle and Donaldson's study.

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Extra space

Turn over ►



Section D**Research Methods**

Answer **all** questions in the spaces provided.

1 9

Read the following information.

At a school sports day, students were asked to run 100 metres on the running track as quickly as they could before and after drinking 150 ml of an energy drink. The researcher recorded the times taken to run 100 metres for each student.

1 9 . 1

Identify the type of experiment used in this study.

Shade **one** box only.

[1 mark]

- A** Field ☐
- B** Independent groups ☐
- C** Laboratory ☐
- D** Matched pairs ☐
- E** Repeated measures ☐

1 9 . 2

Identify the experimental design used in this study.

Shade **one** box only.

[1 mark]

- A** Field ☐
- B** Independent groups ☐
- C** Laboratory ☐
- D** Matched pairs ☐
- E** Repeated measures ☐



2 0Explain **one** difference between primary and secondary data.**[3 marks]**

Turn over for the next question**Turn over ►**

2	1
---	---

Read the following information.

In a sixth form centre, students have independent study lessons as well as subject lessons.

Students use the sixth form learning area during their independent study lessons. They are expected to use their study lessons to finish work related to their subjects.

Teachers are concerned that some students spend more time chatting to friends than finishing work during study lessons. A researcher is asked to investigate how students are using study lessons.

The researcher asked 30 students to fill in a questionnaire about how they spend their study lessons. They selected participants using stratified sampling.

2	1	.	1
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Explain **one** weakness of using a stratified sample when conducting research.

[2 marks]



2 1 . 2

The responses of participants to Question 1 of the questionnaire are shown in **Table 2**.

Table 2 Responses of participants to Question 1:

'Do you think your progress in lessons is positively affected by the amount of time you spend doing independent study?'

YES	NO
19	11

Calculate the percentage of participants who responded YES.

State your answer using **two** significant figures and show your workings.

[3 marks]

Workings:

_____ %

Question 21 continues on the next page

Turn over ►



2 1 . 3

Participants were also asked to estimate the amount of time they spent working and chatting to friends during a typical 70 minute study lesson.

The mean estimates for 30 participants are shown in **Table 3**.

Table 3 Mean estimated amount of time spent working and chatting to friends during a typical 70 minute study lesson for 30 participants.

Activity	Mean estimated time (in minutes)
Time spent working during a typical 70 minute study lesson.	60
Time spent chatting to friends during a typical 70 minute study lesson.	10

What is the ratio of time spent **working** compared to time spent **chatting to friends**?

Write this ratio in its simplest form.

[2 marks]

Answer



2 1 . 4 Read the following information.

The researcher wanted to find out more about the **types of learning activity** happening during study lessons. They decided to observe the actual behaviour of the same participants during study lessons. They worked with an assistant using CCTV camera recordings of the sixth form learning area during study lessons. They used recordings taken over the past two days.

Identify **two** ethical issues that researchers should consider in observation studies. **[2 marks]**

Ethical issue 1 _____

Ethical issue 2 _____

Question 21 continues on the next page

Turn over ►



2 1 . 5

Sketch a **frequency table** the researcher and their assistant can use to collect information about the types of learning activity participants do during study lessons.

Include **two** categories of behaviour about **types of learning activity** in your frequency table.

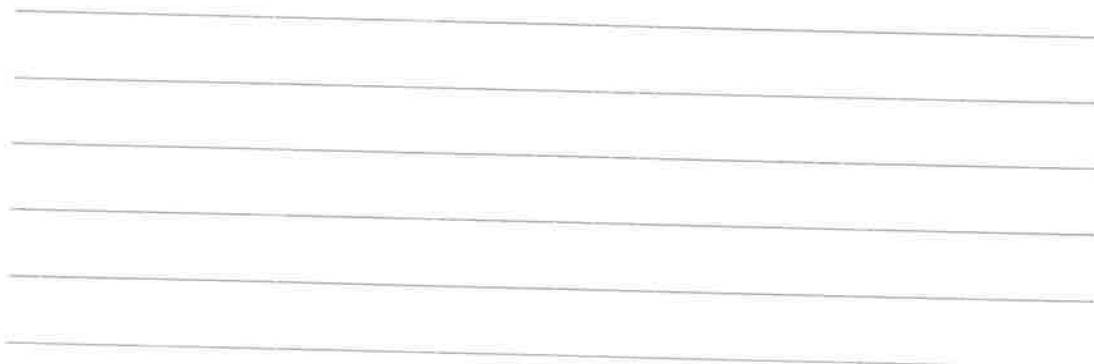
Do not include 'chatting to friends' and 'completing work' as categories of behaviour.

[4 marks]

2 1 . 6

The psychologist and their assistant had high interobserver reliability in their observation study.

Define what is meant by 'interobserver reliability' in observational research.

[2 marks]

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25

END OF QUESTIONS



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