Mark Scheme (Results)

June 2022

Pearson Edexcel
GCSE Psychology (1PS0) Paper 2

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General marking guidance

- All candidates must receive the same treatment. Examiners must mark the last candidate in exactly the same way as they mark the first.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than be penalised for omissions.
- Examiners should mark according to the mark scheme – not according to their perception of where the grade boundaries may lie.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme.
- Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification/indicative content will not be exhaustive.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, a senior examiner must be consulted before a mark is given.
- Crossed-out work should be marked **unless** the candidate has replaced it with an alternative response.

Marking guidance for levels-based mark schemes (LBMS)
Construction of levels-based mark scheme grids

The LBMS grids are broken down into levels where each level is represented by a descriptor which articulates the skill characteristics that the response is likely to demonstrate.

The increase in skills from one level to the next shows the progression between the levels.

The descriptor in each level is broken down into three traits; each trait relates to an Assessment Objective and the relationship is clearly identified. There is a balance of the skills across the levels.

The traits have been designed to reflect the intrinsic links between each of the skills, particularly where students are required to draw together their understanding in order to make judgements about a particular context. Knowledge and understanding of psychological ideas, processes and procedures (AO1) underpin the student's ability to apply this to a given context (AO2). Similarly, for a student to be able to make valid connections between this understanding in order to make appropriate and evidence-based judgements or conclusions (AO3) about the context, they must underpin it using their knowledge and understanding, and by applying it to the context of the question. As a consequence, the progression shown in each band reflects the relationship between these skills.

Finding the right level

The first stage is to decide in which level the answer should be placed. To do this, use a 'best fit' approach, deciding which level most closely describes the quality of

the answer. Where an answer displays characteristics from more than one level you must use the guidance below and your professional judgement to decide which level is most appropriate.

For example, an answer that is logical and evidences application of accurate and thorough understanding to the context of the question, with sustained linkage throughout but with limited evidence to support their judgement, would be placed at the bottom of Level 3 as it has displayed most of the characteristics in a Level 3 response. An answer displaying accurate and thorough understanding but with limited application and unsupported judgements would be placed towards the bottom to middle of Level 2.

Placing a mark within a level

After a level has been decided on, the next stage is to decide on the mark within the level. The instructions below tell you how to reward responses within a level. However, where a level has specific guidance about how to place an answer within a level, always follow that guidance.

If the answer meets the requirements of the level fully, you should be prepared to award full marks within the level. The top mark in the level is used for evidence that is as good as can realistically be expected within that level.
Markers should be prepared to use the full range of marks available in a level and not restrict marks to the middle. Markers should start with the mark at the middle of the level and then move the mark up or down to find the best mark. To do this, they should take into account how far the answer meets the requirements of the level: If it only barely meets the requirements of the level, you should consider awarding marks at the bottom of the level. The bottom mark in the level is used for evidence that is the weakest that can be expected within that level. Alternatively, be prepared to drop the mark to the top of the band below.

The middle marks of the level are used for evidence that has a reasonable match to the requirements. This might represent a balance between some characteristics of the level that are fully met and others that are only barely met.

Imbalanced performance across skills

Where a response has been placed within a level as it displays characteristics from more than one level, then the mark determined should be based on how well the characteristics of each level have been displayed.

Students may show an imbalanced performance against one or more of the traits/skills provided in the levels descriptors. To establish the correct level and mark, the traits/skills within each level should be used. For example, a student may show performance against the descriptors for AO1 and AO2 that displays characteristics of Level 2 but they make a limited attempt to analyse and evaluate (AO3) Level 1. In such instances, the student has demonstrated the Level 2 traits/skills for AO1 and AO2 and the Level 1 trait/skill for AO3, so would be placed in the middle of Level 2 as they achieve 4 marks (2 each) for AO1 and AO2 and 1 of the 3 marks assigned to AO3.

Given the intrinsic links between the trait/skills, if a response evidences performance against only **one** trait/skill it is likely to be for demonstrating knowledge and understanding.

Indicative content

Markers are reminded that indicative content is provided as an illustration of some of the material that may be offered by students. It does not show required content and alternatives should be credited where valid.

Section A
Research methods – How do you carry out psychological research?

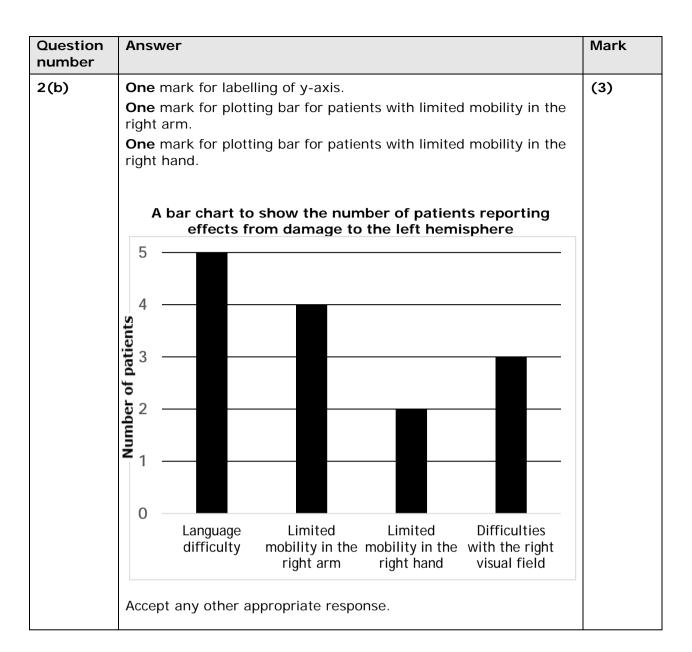| Question number	Answer	Mark
1(a)	C – Quantitative data **The only correct answer is C** A is incorrect as the data is numerical B is incorrect as the data is objective D is incorrect as the data is primary	(1)

Question number	Answer	Mark
1(b)	**One** mark for each appropriate way to standardise the procedure (maximum **two** marks). For example: • Andrew could use the same trigrams for each participant (1) • Andrew could show the trigrams to participants for the same amount of time (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark

1(c)	**One** mark for correct calculation of male participants.
	 One mark for correct answer.
	
	 Calculation: 20/4=
	    • 5 males
	
	 Calculation: 5:15 simplified using a common factor
	    • 1:3
	
	 Accept any other appropriate response.
		(2)

Question number	Answer	Mark
1(d)	**One** mark for calculation of total number of participants. **One** mark for calculation of percentage. • 3+8 = 11 • (11/20)*100 = 55% Accept any other appropriate response	(2)
Question number	Answer	Mark

1(e)	**One** mark for conclusion made. **One** mark for justification of conclusion through analysis of data. • The capacity of short-term memory is between 5 and 12 items (1) as 90% of participants correctly recalled between 5 and 12 of the trigrams they were shown (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
2(a)	**One** mark for correct calculation of patients with difficulty in the right visual field as a fraction of all patients. • Total patients =5; patients with difficulty =3 • $\frac{3}{5}$ Accept any other appropriate response.	(1)

Question number	Answer	Mark
2(b)	**One** mark for labelling of y-axis. **One** mark for plotting bar for patients with limited mobility in the right arm. **One** mark for plotting bar for patients with limited mobility in the right hand. **A bar chart to show the number of patients reporting effects from damage to the left hemisphere** Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
3(a)	**One** mark for correct knowledge of a structured interview. • A structured interview is when a researcher has predetermined questions that they ask interviewees (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
3(b)	**One** mark for understanding of sampling method. **One** mark for application to the scenario. For example: • A random sample is when the participants in a target group all have an equal chance of selection (1), so Juliet could put the names of the available 17-year-old students into a hat and pick out her participant sample (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
3(c)	**One** mark for accurate identification of the type of data. For example: • Juliet gathered primary data directly from the 17-year old students (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
3(d)	**One** mark for correct calculation of the mode for body image scores. • 7 (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
3(e)	**One** mark for giving one way the findings support the conclusion. For example: • As the number of hours spent on social media increased the scores for body image decreased (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
4(a)	**One** mark for understanding of open-ended questions. **One** mark for application to the scenario. • An open-ended question allows respondents to answer freely using their own words and thoughts (1) so Jamie could gather detailed information about why the participants felt they did or did not obey authority figures (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
4(b)	**One** mark for stating one ethical issue that should be considered in the investigation. • All participants should have the right to withdraw from an investigation (1). Accept any other appropriate response.	(1)

Question number	Answer	Mark
4(c)	**One** mark for correct rank ordering. **One** mark for correct answer. • Rank ordering: 13 14 14 15 16 18 18 19 • (15+16)/2 = 15.5 Accept any other appropriate response.	(2)

Question number	Answer	Mark
4(d)	**One** mark for correct calculation. Calculation: 19 - 13 • 6 Accept any other appropriate response.	(1)

Question number	Indicative content	Mark
5	AO1 = 4 marks; AO2 = 4 marks; AO3 = 4 marks Markers must apply the descriptors in line with the general marking guidance (on pages 2–3). Due to the intrinsic links between the skills, if a response evidences performance against only one trait/skill it will be for demonstrating knowledge and understanding. An answer displaying qualities of AO1 only, cannot be awarded more than the top of Level 1, no matter how strong the performance is in AO1. AO1 • Natural experiments have a naturally occurring independent variable which is not manipulated by a researcher. • There is a dependent variable that is measured by the researcher to test the impact of the IV. • They take place in the real-life natural environments of the participants. • The researchers are unable to control for any extraneous variables that could affect the data they gather. AO2 • Becker et al. (2002) tested the naturally occurring introduction of television in Fiji as the independent variable. • They could measure the impact of television on eating behaviours in 1998 against no television exposure in 1995. • There was no manipulation of the length of time that the girls were exposed to television for. • The girls in Becker et al. (2002) could have also had more access to other forms of media which have been an extraneous variable of the study. AO3 • A naturally occurring IV can enable researchers to test variables that are sensitive and would otherwise be unethical to create artificially. • Becker et al. (2002) used standardised and objective measures such as the EAT-26 and BMI to help make sure their measure was comparable between the two samples. • There is high ecological validity in the findings of a natural experiment as the context and conditions of the IV are not artificially imposed by researchers. • Extraneous variables can confound the results of natural experiments, influencing the results and reducing the accuracy of the findings about the impact of television.	(12)

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Demonstrates limited knowledge and understanding of psychological processes and procedures, may not always be relevant (AO1). • Little or no application of psychological processes and procedures to the context (AO2). • Limited attempt to evaluate psychological processes and procedures. Little or no connections between the elements in the question, with unsupported, generic judgements. Limited conclusion that is not fully justified (AO3).
Level 2	4–6	• Demonstrates mostly accurate knowledge and understanding of relevant psychological processes and procedures (AO1). • Some application of psychological processes and procedures to the context but may be limited or lack relevance (AO2). • Some attempt to evaluate psychological processes and procedures but may draw on limited evidence. Mostly logical chains of reasoning, leading to judgements. Basic conclusion reached but may be superficial (AO3).
Level 3	7–9	• Demonstrates accurate and thorough knowledge and understanding of relevant psychological processes and procedures (AO1). • Relevant and accurate application of psychological processes and procedures to the context (AO2). • Sustained and accurate evaluation of psychological processes and procedures, supported with accurate evidence. Sustained and logical chains of reasoning, leading to relevant judgements with justified conclusion (AO3).
Level 4	10–12	• Demonstrates comprehensive and accurate knowledge and understanding of relevant psychological processes and procedures throughout (AO1). • Sustained relevant and accurate application of psychological processes and procedures to the context (AO2). • Comprehensive evaluation of psychological processes and procedures supported with accurate and thorough use of evidence. Sustained and logical chains of reasoning, leading to fully supported judgements with well-justified conclusion (AO3).

Section B
Criminal psychology – Why do people become criminals?

Question number	Answer	Mark
6	D – Random sampling **The only correct answer is D** A is incorrect as this sampling method was not used B is incorrect as this sampling method was not used C is incorrect as this sampling method was not used	**(1)**

Question number	Answer	Mark
7	**One** mark for knowledge of a secondary reinforcer. • A secondary reinforcer is a token or reward that has a value of exchange to meet a primary need (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
8	Up to **two** marks for understanding of vicarious reinforcement. For example: • A person observes someone else being rewarded for criminal activities and actions (1) so the observer replicates the criminal behaviour to gain the same reward (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
9	**One** mark for accurate understanding of community sentencing. **One** mark for exemplification of how community sentencing can be used to explain the scenario. For example: • A community sentence is a non-custodial sentence that can include unpaid work in the local area (1) so Liam could be asked to remove graffiti and tidy up public spaces within the local town (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
10	**One** mark for identification of a reason. **One** mark for reasoning/justification through a theory. For example: • Jayne may see Harriet as a role model, so have paid attention to the fighting and swearing behaviour that Harriet displayed at school (1). Social learning theory would suggest observational learning shows why Jayne retained this behaviour and reproduced it on another occasion in the fight with her sister (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
11	**One** mark for identification of strength/weakness (maximum **two** marks). **One** mark for justification, which must be linked to the strength/weakness identified (maximum **two** marks). For example: Strength • When he plays his music inappropriately loud Edward could immediately receive an undesired consequence of something he does not like which is directly associated with Edwards behaviour (1) which is likely to make Edward stop the anti-social behaviour as he will not want to receive the consequences that result from his actions (1). Weakness • Using only positive punishment for anti-social acts like swearing means Edward would not receive any positive reinforcement for when he is behaving well in society (1). This means Edward may not repeat or continue the desired appropriate behaviour of not swearing and his behaviour is unlikely to improve (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	Mark
12	AO1 = 3 marks; AO2 = 3 marks; AO3 = 3 marks	**(9)**
	Markers must apply the descriptors in line with the general marking guidance (on pages 2–3).	
	Due to the intrinsic links between the skills, if a response evidences performance against only one trait/skill it will be for demonstrating knowledge and understanding. An answer displaying qualities of AO1 only, cannot be awarded more than the top of Level 1, no matter how strong the performance is in AO1.	
	AO1 • Prison is a custodial sentence when a person's freedom in society is taken away as punishment for a criminal offence. • Prison is a form of retributive justice where how long someone spends in prison should reflect the seriousness of the crime. • A person will be under supervision by prison staff and they have limited access to their family or friends.	
	AO2 • Jeff will no longer have any freedom, so prison prevents him committing more crime and keeps society safe. • The robbery of a petrol station is a serious offence and the prison sentence of four years punishes Jeff for the crime. • Jeff may be able to work with prison staff to improve his life chances after prison when he returns to his family.	
	AO3 • Reoffending may only be reduced while in prison so it may not work long term to help Jeff stop offending in the future when he leaves prison. • HM Chief Inspector of Prisons (2015) found that most prisons were overcrowded which may reduce the effectiveness of any prison staff working with Jeff to understand the seriousness of his crime. • Brunton-Smith and Hopkins (2014) found that vocational training in prison resulted in an increased likelihood of employment after release, so Jeff may gain skills to get a job after he has completed his punishment for the crime.	

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Demonstrates isolated elements of knowledge and understanding of a limited range of psychological ideas (AO1). • Provides little or no reference to relevant psychological ideas related to the context (AO2). • Limited attempt to deconstruct relevant psychological ideas. Limited consideration of supporting/refuting evidence, leading to generic judgements (AO3).
Level 2	4–6	• Demonstrates mostly accurate understanding of some relevant psychological ideas (AO1). • Provides some reference to relevant psychological ideas related to the context but this may be limited or lack relevance at times (AO2). • Deconstructs relevant psychological ideas using mostly logical chains of reasoning. Some consideration of supporting/refuting evidence, leading to a judgement (AO3).
Level 3	7–9	• Demonstrates accurate and thorough knowledge and understanding of relevant psychological ideas (AO1). • Provides sustained reference to relevant psychological ideas related to the context (AO2). • Deconstructs relevant psychological ideas using logical chains of reasoning. Sustained consideration of supporting/refuting evidence, showing an awareness of competing arguments, leading to a judgement (AO3).

Section C
The self – What makes you who you are?

Question number	Answer	Mark
13	A – 130 **The only correct answer is A** B is incorrect as this is not the correct number of participants C is incorrect as this is not the correct number of participants D is incorrect as this is not the correct number of participants	(1)

Question number	Answer	Mark
14	**One** mark for knowledge of congruence. • This is when a person's self-image and ideal-self are consistent and match (1). Accept any other appropriate response.	(1)

Question number	Answer	Mark
15	Up to **two** marks for understanding the influence of free will on socially desirable behaviour. For example: • Free will is the belief that human behaviour is a product of personal, individual choice (1) so a belief in free will increases the likelihood of a person being self-motivated to engage in socially desired behaviours (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
16	**One** mark for accurate understanding of personality scales. **One** mark for exemplification of how personality scales can be used to explain the scenario. For example: • A personality scale is a scoring system that measures the different traits that are part of someone's personality (1) so Karen could complete a questionnaire to test how highly she scores in perfectionism which is associated with being in control (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
17	**One** mark for identification of a reason. **One** mark for reasoning/justification through a theory. For example: • Phoebe has not self-actualised because she still has a desire to do more for the charity that she works with (1). According to Maslow (1942) to self-actualise a person must feel that they have become the most that they can be in all aspects of their life (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
18	**One** mark for identification of strength/weakness (maximum **two** marks). **One** mark for justification, which must be linked to the strength/weakness identified (maximum **two** marks). For example: Strength • The result that George is caring and trusting should be accurate as he used a well-established 16PF personality assessment questionnaire to assess personality traits (1) so the questionnaire has been used to test personality traits consistently over time giving high internal validity and making it more likely that George is caring and trusting (1). Weakness • George may have given socially desirable responses to achieve personality trait scores that he believes fit with his social values of being trusting, relaxed or caring (1) meaning the results may reflect a bias towards how George wishes to be seen by others and not an accurate measure of his real personality traits (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	Mark
19	AO1 = 3 marks; AO2 = 3 marks; AO3 = 3 marks Markers must apply the descriptors in line with the general marking guidance (on pages 2–3). Due to the intrinsic links between the skills, if a response evidences performance against only one trait/skill it will be for demonstrating knowledge and understanding. An answer displaying qualities of AO1 only, cannot be awarded more than the top of Level 1, no matter how strong the performance is in AO1. **AO1** • Unconditional positive regard is when praise or affection is given to a person without restrictions or requirements on their behaviour. • Conditional positive regard is when praise or affection is given based on meeting certain conditions imposed on the person by someone else. • Conditions of worth develop when individuals internalise other people's ideas about who they should be over their own. **AO2** • Wilbur's parents tell him they are proud of him for trying his best rather than how well he does at the tasks and activities that he tries. • Oliver's parents tell him they are proud of his achievements, so he is less confident with new things in case he does not achieve well. • Oliver has conditions based on achievement determining his worth which may be why he wants to be a Doctor to impress his Dad. **AO3** • Rogers (1959) suggested that affection without conditions from significant others could lead to Wilbur's higher self-esteem and confidence, which can explain why he continues to try his best. • Conditional positive regard could result in Oliver's dependency on external praise to build his self-esteem, as Rogers (1959) claimed that self-concept is based on the standards of others. • Oliver may want to be a Doctor as a result of observing his Dad at work and being motivated to achieve the same rewards, so positive regard may not fully explain all of Oliver's behaviours.	**(9)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Demonstrates isolated elements of knowledge and understanding of a limited range of psychological ideas (AO1). • Provides little or no reference to relevant psychological ideas related to the context (AO2). • Limited attempt to deconstruct relevant psychological ideas. Limited consideration of supporting/refuting evidence, leading to generic judgements (AO3).
Level 2	4–6	• Demonstrates mostly accurate understanding of some relevant psychological ideas (AO1). • Provides some reference to relevant psychological ideas related to the context but this may be limited or lack relevance at times (AO2). • Deconstructs relevant psychological ideas using mostly logical chains of reasoning. Some consideration of supporting/refuting evidence, leading to a judgement (AO3).
Level 3	7–9	• Demonstrates accurate and thorough knowledge and understanding of relevant psychological ideas (AO1). • Provides sustained reference to relevant psychological ideas related to the context (AO2). • Deconstructs relevant psychological ideas using logical chains of reasoning. Sustained consideration of supporting/refuting evidence, showing an awareness of competing arguments, leading to a judgement (AO3).

Section D
Perception – How do you interpret the world around you?

Question number	Answer	Mark
20	C - 3 **The only correct answer is C** A is incorrect as three quadrants contained objects B is incorrect as three quadrants contained objects D is incorrect as three quadrants contained objects	(1)

Question number	Answer	Mark
21	**One** mark for knowledge of stereopsis. • Stereopsis is the perception of depth using visual input from both eyes through binocular vision (1). Accept any other appropriate response.	(1)

Question number	Answer	Mark
22	Up to **two** marks for understanding of texture gradient. For example: • Texture gradient is where different levels of detail can be seen in the texture of an object (1) so as the texture becomes smoother and finer it indicates a further distance and depth in monocular vision (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
23	**One** mark for accurate understanding of optic flow. **One** mark for exemplification of how optic flow can be used to explain the scenario. For example: • Gibson (1966) suggested that optic flow is the perception of movement from the observer's motion through an environment (1) so the flight simulator video is programmed to provide an optic flow of faster movement for objects close by and slower for objects in the distance (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
24	**One** mark for identification of a way **One** mark for reasoning/justification through a concept For example: • Jennifer was happy from winning a prize at the competition, so she perceived the flowers more positively as bright and pretty (1). The emotion someone feels can provide a frame of reference for how they perceive sensory input, with her happier emotions leading Jennifer to perceive brighter colours (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
25	**One** mark for identification of each way (maximum **two** marks). **One** mark for justification which must be linked to the way identified (maximum **two** marks). For example: • Marigold may have formed a perceptual hypothesis based on prior knowledge from recently seeing vase and firstly perceived the illusion to be a picture of a vase (1) because prior knowledge helps observers to fill in any gaps from our sensory input to try and make sense of what is being perceived (1). • Marigold may see two images because she is able to determine from stored information about a vase and faces that both of these images are visible (1), as we can test the perceptual hypothesis of what we see based on experiences which means observers can perceive an image in multiple ways (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	Mark
26	AO1 = 3 marks; AO2 = 3 marks; AO3 = 3 marks Markers must apply the descriptors in line with the general marking guidance (on pages 2–3). Due to the intrinsic links between the skills, if a response evidences performance against only one trait/skill it will be for demonstrating knowledge and understanding. An answer displaying qualities of AO1 only, cannot be awarded more than the top of Level 1, no matter how strong the performance is in AO1. **AO1** • Carmichael, Hogan and Walter (1932) presented images with a verbal prompt of 'the next figure resembles…' and then a name for the image was given. • Results showed that in the images drawn by participants, 74% of list I and 73% of list II were more like the name that was given at presentation than the image seen. • They concluded that the word presented when someone first visually perceives a figure can determine the image that is reproduced. **AO2** • When Steven and Thomas heard the words and saw the image of the ambiguous figures, they were in a controlled and artificial experimental context. • Steven and Thomas were presented with words for the image at the same time as each image was shown to them, rather than before seeing the image. • The drawings may differ from the ambiguous figure shown because Steven may have drawn a ruler, while Thomas's may have drawn a comb instead of the actual image given. **AO3** • The artificial context of the study may not represent how Steven and Thomas would reproduce ambiguous figures in a natural environment or real-life situation. • The procedure was not precisely replicated, so the findings from Carmichael, Hogan and Walter (1932) may not fully explain differences in the drawings by Steven and Thomas. • Differences in Steven and Thomas's drawings are similar to the results from Carmichael, Hogan and Walter (1932) that over 70% of the redrawn images looked more like the word than the figure.	**(9)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Demonstrates isolated elements of knowledge and understanding of a limited range of psychological ideas (AO1). • Provides little or no reference to relevant psychological ideas related to the context (AO2). • Limited attempt to deconstruct relevant psychological ideas. Limited consideration of supporting/refuting evidence, leading to generic judgements (AO3).
Level 2	4–6	• Demonstrates mostly accurate understanding of some relevant psychological ideas (AO1). • Provides some reference to relevant psychological ideas related to the context but this may be limited or lack relevance at times (AO2). • Deconstructs relevant psychological ideas using mostly logical chains of reasoning. Some consideration of supporting/refuting evidence, leading to a judgement (AO3).
Level 3	7–9	• Demonstrates accurate and thorough knowledge and understanding of relevant psychological ideas (AO1). • Provides sustained reference to relevant psychological ideas related to the context (AO2). • Deconstructs relevant psychological ideas using logical chains of reasoning. Sustained consideration of supporting/refuting evidence, showing an awareness of competing arguments, leading to a judgement (AO3).

Section E
Sleep and dreaming – Why do you need to sleep and dream?

Question number	Answer	Mark
27	B - Approximately 18 to 51¾ hours **The only correct answer is B** A is incorrect as his sleep-wake cycles range was longer C is incorrect as his sleep-wake cycles range was longer D is incorrect as his sleep-wake cycles range was longer	**(1)**

Question number	Answer	Mark
28	**One** mark for knowledge of latent content • Latent content is the underlying hidden meaning behind a dream (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
29	Up to **two** marks for understanding the effect of light For example: • Light is an exogenous zeitgeber that is registered by the retina in the eye (1) that helps signal when it is time to sleep or wake up (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
30	**One** mark for accurate understanding of narcolepsy. **One** mark for exemplification of how narcolepsy can be used to explain the scenario. For example: • Narcolepsy is a sleep disorder that results in the brain having problems regulating the wakefulness of an individual (1) which is why Duncan may fall asleep at inappropriate times and feels drowsy during the day when he should be feeling awake (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
31	**One** mark for identification of a reason. **One** mark for reasoning/justification through a theory. For example: • The occasions when brain activity increased while Betty was asleep may have been during the stage of sleep where she was dreaming (1), which Activation Synthesis Theory (Hobson and McCarley, 1977) suggests is because the random activation of neurons takes place to send electrical impulses during REM sleep (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
32	**One** mark for identification of each way (maximum **two** marks). **One** mark for justification which must be linked to the way identified (maximum **two** marks). For example: • Barbara believes that Amy's dreams represent a fear of being in her new flat and coping independently away from her family which cause her to feel afraid (1) which Freud (1909) found in 'Little Hans's' dream of his mother leaving which was interpreted as an expression of his fear of losing his mother (1). • Barbara may interpret Amy feeling abandoned and alone in her dream about being left in a shop as representing her being in a new place away from home (1) which Freud (1909) could suggest represents wanting to return home similar to Hans wanting to go back to Gmunden and spend time with his friend Mariedl (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	Mark
33	AO1 = 3 marks; AO2 = 3 marks; AO3 = 3 marks	**(9)**
	Markers must apply the descriptors in line with the general marking guidance (on pages 2–3).	
	Due to the intrinsic links between the skills, if a response evidences performance against only one trait/skill it will be for demonstrating knowledge and understanding. An answer displaying qualities of AO1 only, cannot be awarded more than the top of Level 1, no matter how strong the performance is in AO1.	
	AO1 • The pineal gland is located in the brain and is responsible for the production of melatonin. • Melatonin is a hormone that rises in the evening when it begins to go dark to prepare a person for sleeping. • Hormones help regulate the circadian rhythm which is an internal body clock that helps maintain the sleep-wake cycle. AO2 • The doctor may test the functioning of Basil's pineal gland to see if the suprachiasmatic nucleus is signalling to produce or reduce sleep hormones. • Basil may not be exposed to sufficient light in the day so is not then producing sufficient melatonin at night to make him sleepy and finds it hard to fall asleep. • The medication may not be fully working because of external factors such as insufficient light in the morning that may also cause Basil to have problems waking up. AO3 • Levels of hormones and pineal gland functioning can be tested empirically using scientific methods increasing the scientific credibility of hormonal explanations of Basil's sleep difficulty. • Evidence from Siffre (1975) suggests that zeitgebers have an influential role as exogenous pacemakers in setting the internal body clock for the sleep-wake cycle, so hormones may not be the only influence on Basil. • Skene and Arendt (2007) showed that blind people with some light perception have normal circadian rhythms but those without light perception show abnormal circadian rhythms, so Basil could also need light simulation to help regulate his circadian rhythm.	

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Demonstrates isolated elements of knowledge and understanding of a limited range of psychological ideas (AO1). • Provides little or no reference to relevant psychological ideas related to the context (AO2). • Limited attempt to deconstruct relevant psychological ideas. Limited consideration of supporting/refuting evidence, leading to generic judgements (AO3).
Level 2	4–6	• Demonstrates mostly accurate understanding of some relevant psychological ideas (AO1). • Provides some reference to relevant psychological ideas related to the context but this may be limited or lack relevance at times (AO2). • Deconstructs relevant psychological ideas using mostly logical chains of reasoning. Some consideration of supporting/refuting evidence, leading to a judgement (AO3).
Level 3	7–9	• Demonstrates accurate and thorough knowledge and understanding of relevant psychological ideas (AO1). • Provides sustained reference to relevant psychological ideas related to the context (AO2). • Deconstructs relevant psychological ideas using logical chains of reasoning. Sustained consideration of supporting/refuting evidence, showing an awareness of competing arguments, leading to a judgement (AO3).

Section F
Language, thought and communication — How do you communicate with others?

Question number	Answer	Mark
34	C - 95 Japanese students **The only correct answer is C** A is incorrect as this was the number of male Japanese students B is incorrect as this was the number of female USA students D is incorrect as this was the number of USA students	**(1)**

Question number	Answer	Mark
35	**One** mark for accurate knowledge of facial expressions. • When people communicate with each other using parts of their face, such as smiling (1). Accept any other appropriate wording.	**(1)**

Question number	Answer	Mark
36	Up to **two** marks for understanding of proxemics. For example: • Proxemics describes the comfortable levels of personal space when communicating with different people (1), with close friends this communication is usually comfortable within a personal distance of 2-4ft (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
37	**One** mark for accurate understanding of linguistic relativism **One** mark for exemplification of how linguistic relativism can be used to explain the scenario. For example: • Linguistic relativism suggests that a person's view of the world depends on their language (1) so Ivan may only know two shades of blue if he speaks a language that does not have names for alternatives shades of blue (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
38	**One** mark for identification of a reason. **One** mark for reasoning/justification through a study. For example: • The first language of the company Ernie wants to meet with use horizontal metaphors such as Monday being behind Tuesday as descriptors of time (1). Boroditsky (2001) found that English speakers conceive time in a horizontal way, while Mandarin speakers conceive time vertically (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
39	**One** mark for identification of each reason (maximum **two** marks). **One** mark for justification which must be linked to the reason identified (maximum **two** marks). For example: • The baby chimpanzee used non-verbal communication of eye-contact and pulling at fur to gain the attention of the mother for comfort and food (1), which indicates the baby may have been communicating a need for food instinctively to aid its own survival to reach adulthood (1). • The mother's use of a screeching noise and baring her teeth could be to warn off the approaching chimpanzee in case it was a threat to her or the baby (1). The noise and innate signalling of baring teeth may be to ensure her offspring is protected, so strengthening their chances of survival (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	Mark
40	AO1 = 3 marks; AO2 = 3 marks; AO3 = 3 marks Markers must apply the descriptors in line with the general marking guidance (on pages 2–3). Due to the intrinsic links between the skills, if a response evidences performance against only one trait/skill it will be for demonstrating knowledge and understanding. An answer displaying qualities of AO1 only, cannot be awarded more than the top of Level 1, no matter how strong the performance is in AO1. AO1 • Piaget claims that the mental process of thought is required before language can be used to name or describe the world. • Children's language reflects the development of their logical thinking and reasoning skills. • Egocentric speech is often repetitive phrases or a commentary of ideas that do not require a listener to be present. AO2 • Anton may have started to name his 'teddy' because he understands what this object is and has a schema for it. • Anton cannot name unfamiliar objects like the kettle because he does not have the underpinning cognitive knowledge of what this object is to use language to name it. • The use of random words by Anton when talking to his mum suggests he is commentating on the world but not yet using speech to communicate thought with his mum as the listener. AO3 • Piaget's ideas can be applied to age appropriate education of children by presenting them with cognitively suitable objects they can create schema for to develop language skills. • Vygotsky (1981) believed language and thought develop independently with pre-verbal thought and pre-intellectual speech, so Anton's use of words may not need to reflect his thoughts or cognition as they are distinct. • Chomsky (1965) proposed that the brain contains a language acquisition device which has 'universal grammar' so the basics are already there regardless of Anton's cognition and thought.	**(9)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Demonstrates isolated elements of knowledge and understanding of a limited range of psychological ideas (AO1). • Provides little or no reference to relevant psychological ideas related to the context (AO2). • Limited attempt to deconstruct relevant psychological ideas. Limited consideration of supporting/refuting evidence, leading to generic judgements (AO3).
Level 2	4–6	• Demonstrates mostly accurate understanding of some relevant psychological ideas (AO1). • Provides some reference to relevant psychological ideas related to the context, but this may be limited or lack relevance at times (AO2). • Deconstructs relevant psychological ideas using mostly logical chains of reasoning. Some consideration of supporting/refuting evidence, leading to a judgement (AO3).
Level 3	7–9	• Demonstrates accurate and thorough knowledge and understanding of relevant psychological ideas (AO1). • Provides sustained reference to relevant psychological ideas related to the context (AO2). • Deconstructs relevant psychological ideas using logical chains of reasoning. Sustained consideration of supporting/refuting evidence, showing an awareness of competing arguments, leading to a judgement (AO3).