

Mark schemes

Q1.

[AO1 = 3 AO3 = 5]

Level	Marks	Description
4	7-8	Knowledge of research into violation of expectation is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5-6	Knowledge of research into violation of expectation is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3-4	Limited knowledge of research into violation of expectation is present. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1-2	Knowledge of research into violation of expectation is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- violation of expectation research involves two stages – the familiarisation stage and the impossible event stage
- familiarisation stage – infants watch a moving apparatus a number of times, eg train moving down a track into a tunnel and out to the other side; a tall and short carrot moving behind a screen; a drawbridge lowering to rest on top of a block. All these events are possible
- impossible event stage – infants watch the same apparatus but this time the event they observe is impossible, eg the train fails to appear on the other side of the tunnel; the tall carrot does not appear in the high window of the screen as it moves behind the screen; the drawbridge appears to pass through the block
- the dependent variable is the time spent looking at the event – preferential looking
- Baillargeon found that infants as young as 2–3 months spent a longer time looking at impossible events than possible events.

Possible discussion:

- adoption of violation of expectation as the standard paradigm used to assess understanding of the physical world
- implications of the findings for theory of object permanence and

comparison with Piaget's findings that object permanence arises at about 8 months

- discussion of the validity of the dependent measure used in violation of expectation research – questions about looking at time as a valid measure of surprise and use of surprise to infer object permanence
- physiological evidence seems to support Baillargeon's interpretations – increased neural activity in the right temporal region during the impossible condition (Kaufman 2003)
- argument that looking reflects interest rather than surprise, ie the child notices a difference but does not necessarily understand why there is a difference
- problems of assessing cognitive processing in very young infants, eg level of arousal.

Credit other relevant material.

[8]

Q2.

[AO1 = 6 AO3 = 10]

Level	Mark	Description
4	13-16	Knowledge of what psychological research has told us about children's understanding of the object permanence is accurate and generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9-12	Knowledge of what psychological research has told us about children's understanding of the object permanence is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5-8	Limited knowledge of what psychological research has told us about children's understanding of the object permanence is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1-4	Knowledge of what psychological research has told us about children's understanding of the object permanence is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- object permanence is the ability to understand that objects (and people)

- continue to exist even though they are out of sight
- first studied by Piaget and later studied by Baillargeon
- Piaget's view – object permanence arises at approximately 8/9 months – he demonstrated object permanence by covering a toy in full view of a child and observing the age at which the child would search for the toy
- Piaget also investigated errors in searching original locations
- knowledge of Piaget's specific studies of object permanence
- Baillargeon's view – object perception and object permanence evident in very young infants – from 2/3 months – demonstrated in violation of expectation studies involving measurement of looking time as dependent variable to infer surprise, with familiarisation stage followed by impossible event stage
- knowledge of Baillargeon's specific studies including tall/short rabbit and window; tall/short carrot; Minnie Mouse; truck and ramp; box and drawbridge.

Credit other relevant knowledge of psychological research into object permanence.

Possible discussion:

- discussion and/or comparison of Piaget's and/or Baillargeon's research on object permanence
- methodological evaluation linked to object permanence, eg sophistication of Baillargeon's methods versus Piaget's more naive measurements of object permanence
- discussion of the scientific value of techniques linked to object permanence, eg use of inference; measurement of looking and surprise as DVs
- alternative interpretation of Piaget's and/or Baillargeon's findings, eg Bower and Wishart's use of darkness to hide objects; Cashon and Cohen (2000) alternative views on use of surprise as a DV – results indicate attraction to novel stimuli
- age of children as a possible confounding factor in both Piaget's and Baillargeon's studies
- general points re object permanence and broader issues, eg Nativism versus constructivism, determinism.

Credit other relevant material.

Note: full credit can be awarded for different possible approaches to this question, eg primary focus on Piaget, primary focus on Baillargeon, equal focus on both Piaget and Baillargeon.