

Solutions

Each answer shows the steps, then the **result**.

2.1

- bottom-up builds a percept from incoming sensory data; top-down interprets it using expectation, context and prior knowledge

2.2

- attention is required for conscious perception; an unattended event can be fully visible and still go unnoticed

2.3

(a)

- shape constancy

(b)

- a trapezoid, not a rectangle

3.1 B

- context and expectation supply the interpretation the data alone does not

3.2 B

- relative size is available to one eye, so it is a monocular cue

3.3

(a)

- inattentional blindness

(b)

- perception is selective, not a complete recording, so what is unattended may never reach awareness at all

3.4

(a)

- Independent variable — the type of photographs shown beforehand, birds or mammals (1). Dependent variable — which animal the participant reported seeing in the ambiguous drawing (1)

(b)

- **Perceptual set** — the readiness to perceive one thing rather than another (1). The two groups received identical sensory input but reported different images, so the difference must come from the expectation created by the priming photographs (1)

(c)

- **Sensation** is the detection of physical stimulus energy by the receptors and its transduction into neural signals — here, the same pattern of light falling on every participant's retina (1). **Perception** is the brain's organisation and interpretation of that input, which is why the same signal became a duck for one group and a rabbit for the other (1)

(d)

- The stimulus was physically identical for everyone, and participants were randomly allocated, so any difference in the eyes themselves would be spread evenly across both groups (1)