

The eye: practice questions

5 questions • 12 marks • mark scheme at the back

For Edexcel GCSE Biology 1BI0 and Combined Science 1SC0. **Triple only** is not in Combined Science. **Higher tier** is only on the Higher paper.

Name

Total / 12

1 **Triple only** [1 mark]

Which cells in the retina detect colour?

- A. ☐ Rod cells
- B. ☐ Cone cells
- C. ☐ Iris cells
- D. ☐ Lens cells

2 **Triple only** [3 marks]

Describe the function of the cornea, the lens and the iris.

3 **Triple only** [4 marks]

A short-sighted person cannot see distant objects clearly. Explain why this happens and how it can be corrected.

4 **Triple only** [2 marks]

Describe what a cataract is and how it can be treated.

5

Triple only

[2 marks]

Explain what causes colour blindness.

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Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [1] Triple only

B B (1)

2. [3] Triple only

- cornea: refracts / bends light entering the eye (1)
- lens: refracts light to focus it on the retina (1)
- iris: controls how much light enters the eye (1)

3. [4] Triple only

- light from distant objects is focused in front of the retina (1)
- because the eyeball is too long / the lens refracts the light too much (1)
- corrected with a concave lens (in glasses or contact lenses) (1) allow laser surgery to change the shape of the cornea
- which spreads the light out so that it focuses on the retina (1)

4. [2] Triple only

- the lens becomes cloudy, so less light reaches the retina (1)
- the lens is replaced with an artificial lens by surgery (1)

5. [2] Triple only

- one or more types of cone cell are missing / not working properly (1)
- so the person has difficulty telling some colours apart, such as red and green (1)