

DNA, genes and protein synthesis: practice questions

3 questions · 5 marks · mark scheme at the back

For Edexcel International GCSE Science (Double Award) 4SD0.

Name

Total / 5

1 Which statement correctly describes a gene? [1 mark]

- A. ☐ The entire DNA of an organism
- B. ☐ A section of a DNA molecule that codes for a specific protein
- C. ☐ A structure in the nucleus made of many chromosomes
- D. ☐ A single base in a DNA molecule

2 Describe how genes, chromosomes and the nucleus are related. [3 marks]

3 In a human body cell, where are chromosomes found? [1 mark]

- A. ☐ Ribosomes
- B. ☐ Cell membrane
- C. ☐ Nucleus
- D. ☐ Mitochondria

Mark scheme

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

1. [1]

B B (1)

2. [3]

- the nucleus contains chromosomes (1)
- genes are located on the chromosomes (1)
- each gene is a section of DNA that codes for a specific protein (1)
- all chromosomes are made of DNA / one long DNA molecule

3. [1]

C C (1)