

Genes and chromosomes

STUDENT BOOK pp. 130, 236, 305

1. What is a chromosome? Check the correct answer.

- a) Cell organelle that handles cellular respiration.
- b) Element of the nucleus that contains hereditary information.
- c) Membrane surrounding the cell nucleus
- d) Code supplying hereditary information

2. What is a gene? Check the correct answer.

- a) Unit of hereditary information located on a chromosome
- b) An individual's entire genetic code
- c) Organelle containing information about the cell
- d) Complex molecule shaped like a double helix

3. Indicate if each statement refers to genes or chromosomes.

- a) Human beings have tens of thousands of them. genes
- b) Human beings have 23 pairs of them. chromosomes
- c) They are responsible for hereditary traits. genes
- d) They are segments of DNA (deoxyribonucleic acid). genes

4. What is a hereditary trait?

characteristic transmitted from one generation to another

5. Give three examples of hereditary traits.

eye color, skin color, hair color,
widow's peak, height as adult

6. Rank the following elements from smallest to largest.

Cell	Gene	Chromosome	Nucleus
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gene - chromosome - nucleus - cell