



Statement of participation

Francesca Capochiani

has completed the free course including any mandatory tests for:

What is the genome made of?

To understand how DNA works as hereditary material we need to know its structure. This 4-hour free course looked at this and its relative stability.

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This statement does not imply the award of credit points nor the conferment of a University Qualification.
This statement confirms that this free course and all mandatory tests were passed by the learner.
Please go to the course on OpenLearn for full details:
<http://www.open.edu/openlearn/science-maths-technology/science/biology/what-the-genome-made/content-section-0>

COURSE CODE: SK195_2



What is the genome made of?

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Course summary

Genomes are composed of DNA, and a knowledge of the structure of DNA is essential to understand how it can function as hereditary material. DNA is remarkable, breathtakingly simple in its structure yet capable of directing all the living processes in a cell, the production of new cells and the development of a fertilized egg to an individual adult. DNA has three key properties: it is relatively stable; its structure suggests an obvious way in which the molecule can be duplicated, or replicated; and it carries a store of vital information that is used in the cell to produce proteins. The first two properties of DNA are analysed in this free course, What is the genome made of?

Learning outcomes

By completing this course, the learner should be able to:

- understand the basic composition and structure of DNA
- understand what is meant by complementary DNA base pairing
- understand how base pairing allows a mechanism for DNA replication
- understand the number of DNA molecules within a chromosome.

Completed study

The learner has completed the following:

Section 1

Overview

Section 2

Conclusion