

Name:

Class:



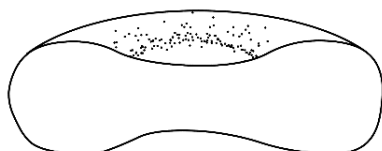
What is the role of the hypothalamus in homeostasis?

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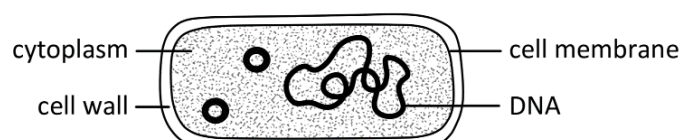
The diagram shows a specialised cell cut in half.



What does this diagram indicate about the structure of this cell?

- A** The cell does not have a membrane.
- B** The cell is concave on each side.
- C** The cell is long and thin.
- D** The cell is red and carries oxygen.

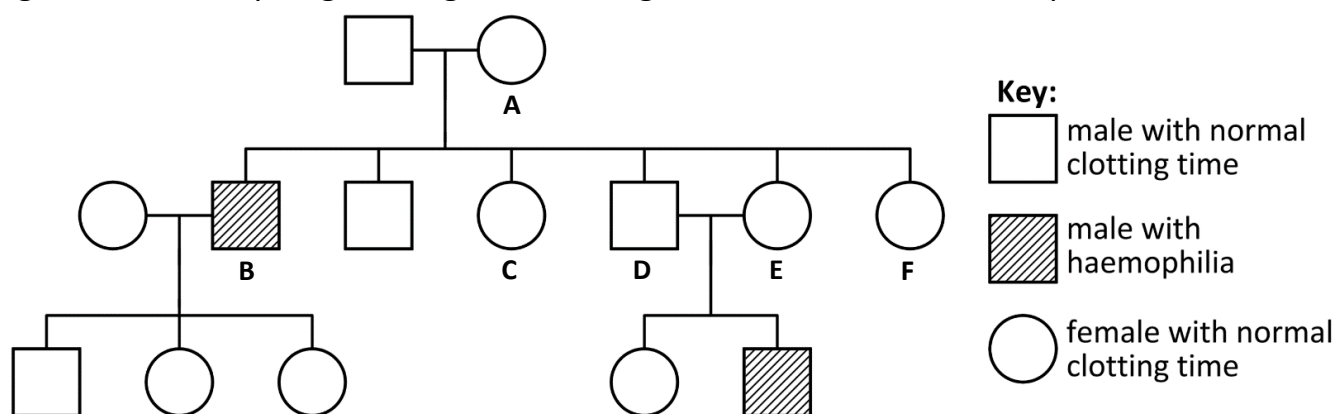
The diagram shows a bacterial cell.



How is this cell different from a typical animal cell?

- A** It has a cell membrane.
- B** It has cytoplasm
- C** It has no chloroplasts.
- D** It has no nucleus.

Haemophilia is a sex-linked blood disorder in which blood takes a long time to clot. The figure below is a pedigree diagram showing the inheritance of haemophilia.



The normal allele is represented by X^H and the mutant allele is represented by X^h .

i. State the genotypes of the people identified as A, B and the **two** possible genotypes of individual C in the figure above.

A = ...

B = ...

C = ... or

ii. The couple D and E are expecting another child.

What is the probability that the child will have haemophilia?

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