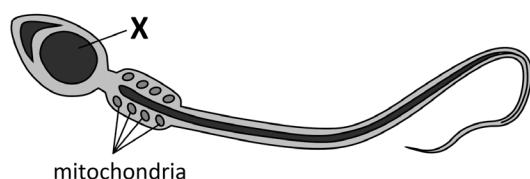


Name:

Class:



The diagram shows a human sperm cell.



Structure **X** on the diagram contains DNA.
Name structure **X**.

Nucleus

The cells produced when B lymphocytes and myeloma cells combine are called?

- A** Antibodies
- B** Hybridomas
- C** Memory lymphocytes
- D** Platelets

Sperm cells are involved in fertilisation.
Define fertilisation.

Fertilisation is the fusing of the nuclei of two gametes to form a zygote.

Describe the function of mitochondria.

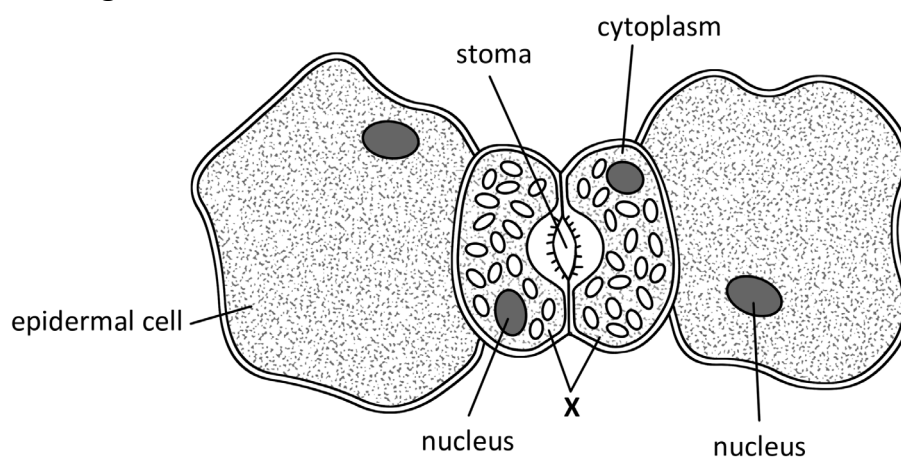
They are the site of aerobic respiration.

Compare and contrast mitosis and meiosis.

Mitosis produces two genetically identical diploid daughter cells in one division.

Meiosis produces four genetically different haploid daughter cells in two divisions.

The diagram shows some of the surface cells of a leaf.



Write down the name of
the cell labelled X.

Guard cell

Describe two functions of stomata.

A description to include:

- **Allows gaseous exchange (of CO₂ and O₂).**
- **Allows water evaporation (to help transpiration).**

Why is it important to ensure that body temperature is kept within a narrow range?

Accept any **one of the following:**

- **To ensure that enzymes work at their optimum temperature.**
- **To prevent enzymes from being denatured or denaturing.**