

Science

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(Chapter – 8) (How Do Organisms Reproduce?)

(Class – X)

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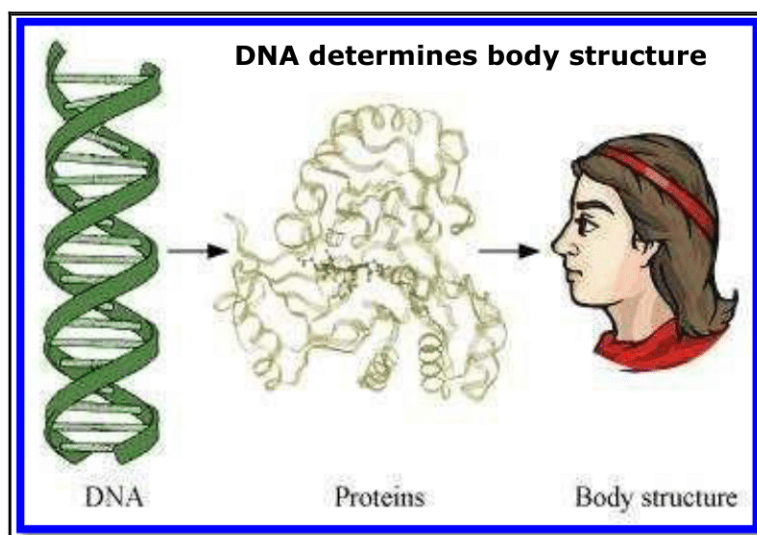
Question 1:

What is the importance of DNA copying in reproduction?

Answer 1:

DNA (Deoxyribonucleic acid) is the genetic material found in the chromosomes, which are present in the nucleus of a cell. The DNA is the information site for making proteins and each specific type of protein leads to a specific type of body design.

Thus, it is the DNA molecule that determines the body design of an individual. Therefore, it can be concluded that it is the DNA that gets transferred from parents to offsprings and makes them look similar.



Question 2:

Why is variation beneficial to the species but not necessarily for the individual?

Answer 2:

Variations are beneficial to the species than individual because sometimes for a species, the environmental conditions change so drastically that their survival becomes difficult. For example, if the temperature of water increases suddenly, then most of the bacteria living in that water would die. Only few variants that are resistant to heat would be able to survive. However, if these variants were not there, then the entire species of bacteria would have been destroyed.

Thus, these variants help in the survival of the species. However, all variations are not necessarily beneficial for the individual organisms.