**B9 - INHERITANCE**

**9.2 - CELL DIVISION**

**1. Define mitosis**

As nuclear division giving rise to genetically identical cells in which the chromosome number is maintained by the exact duplication of chromosomes.

**2. State the role of mitosis**

* Helps in growth;
* Repairs damaged tissues;
* Replaces worn out cells;
* Asexual reproduction.

**3. Define meiosis.**

As a reduction in which the chromosome number is halved from diploid to haploid.

**4. State that gametes are the result of meiosis.**

Gametes are the result of meiosis, which on fertilization helps to retain the chromosome number specific for a species.



**5. State that meiosis results in genetic variation so the cells produced are not all genetically identical.**

* Sex cells are formed in the gonads (ovaries and testes) by meiosis;
* The gametes (sex cells) produced are haploid, but they are formed from diploid cells;
* Thus meiosis involves halving the normal chromosome number;
* At the end of the process, cells produced are not all identical, thus meiosis results in variation.