

Cell Division

6.1 Cell Division

- **Karyokinesis** involves the division of the nucleus.
- **Cytokinesis** involves the division of the cytoplasm.

Organism cell consists of somatic and gamete cell:

Somatic cell

- Body cells apart from gametes
- Somatic cells are produced through the mitosis process
- It contains a **diploid** number of chromosomes, that is, each cell contains two sets of chromosomes or 2n. In human somatic cells, 2n=46
- In diploid cells, one set of chromosomes originate from the male parent (**paternal chromosomes**), another set is from the female parent (**maternal chromosomes**)

Gamete cell

- Gametes are reproductive cells
- Gametes are produced through the meiosis process
- It contains a **haploid** number of chromosomes, that is, each cell contains one set of chromosomes or n.In human gametes, n=23