

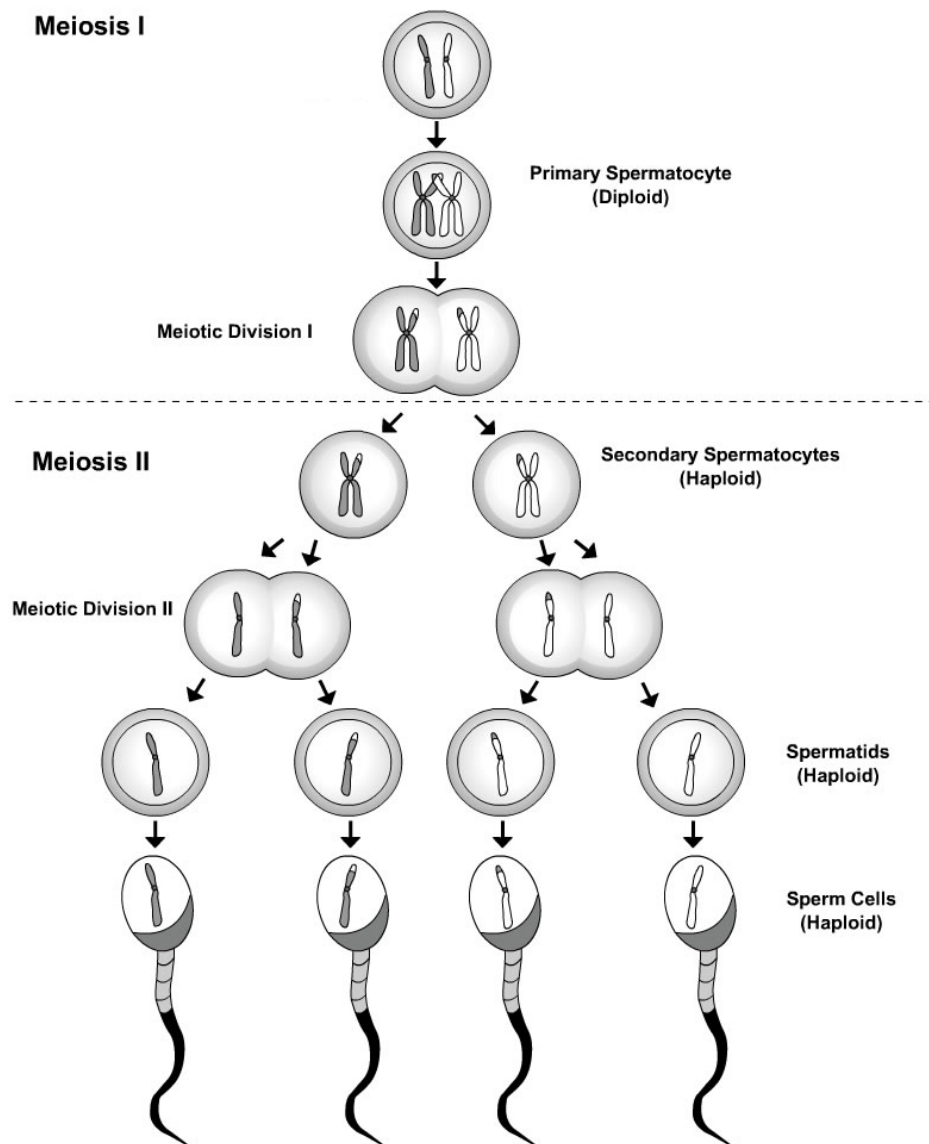
Gametogenesis

Gametogenesis is the process by which a diploid cell undergoes meiosis in order to form haploid gametes.

Animals produce gametes in organs called **gonads**. Males and females of a species that reproduces sexually have different forms of gametogenesis. The male form, called spermatogenesis, takes place in the **testes**. The female form, called oogenesis, takes place in the **ovaries**.

Spermatogenesis

- takes place in the testes
- produces four sperm cells, all of which are capable of fertilization
- each sperm cell is haploid and has a unique combination of DNA
- sperm cells have tails that give them the ability to move



Oogenesis

- takes place in the ovaries
- produces one egg (ovum) that is capable of fertilization
- produces three polar bodies that are incapable of fertilization and are discarded at the end of the process
- the egg is haploid
- every egg produced by a female has a unique combination of DNA
- egg cells do not have the ability to move
- egg cells contain a large amount of cytoplasm that functions as a food reserve

