This article is about the sexes that occur in sexually reproducing organisms. For other uses, see Sex (disambiguation).

The male gamete (sperm) fertilizing the female gamete (ovum)
In biology, sexual reproduction is a process of combining and mixing genetic traits, often resulting in the specialization of organisms into a male or female variety, each known as a sex.[1] Sexual reproduction involves combining specialized cells (gametes) to form offspring that inherit traits from both parents. Gametes can be identical in form and function (known as isogamy), but in many cases an asymmetry has evolved such that two sex-specific types of gametes (heterogametes) exist (known as anisogamy). By definition, male gametes are small, motile, and optimized to transport their genetic information over a distance, while female gametes are large, non-motile and contain the nutrients necessary for the early development of the young organism.
An organism's sex is defined by the gametes it produces: males produce male gametes (spermatozoa, or sperm in animals or pollen in plants) while females produce female gametes (ova, or egg cells); individual organisms which produce both male and female gametes are termed hermaphroditic.
Frequently, physical differences are associated with the different sexes of an organism; these sexual dimorphisms can reflect the different reproductive pressures the sexes experience.