

## Chromosome and DNA

DNA is genetic material found in the nucleus of cells. It contains the genes that code for our physical appearances. It is often called the blueprint for building an organism because it codes for our entire physical body. DNA also exists in a more condensed form called chromosomes. A chromosome is packed with DNA and very dense. Chromosomes exist in pairs because individuals have one set from the mom and one set from the dad. In humans, we have 23 chromosome pairs, with 1 of those pairs being the sex chromosomes (XX or XY). Chromosomes, like DNA, are found in the nucleus. Any DNA outside the nucleus has the possibility of being destroyed in animal cells.



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### DNA is the blueprint for building an organism

[DNA-Dude with Blueprints for Building a Human Scientist](#)

DNA contains the genetic code. Variations in the genetic code allow for people to look unique. Thus, DNA is used as a blueprint or template for building an organism.

### A chromosome is packed with DNA

[Magnifying-glass showing DNA-dude in Chrome-chromosome](#)

Chromosomes are condensed forms of DNA. DNA gets packed tightly together and wound around proteins. The condensed form of DNA is called a chromosome.

### Chromosomes exist in pairs

[Chrome-Chromosomes in Pairs](#)

All chromosomes in the human body exist in pairs, except the sex chromosomes. This is because humans have one set of chromosomes from the mom and one set from the dad.

### Humans have 23 chromosome pairs

[23 beneath Chrome-Chromosome Pairs](#)

Humans have 23 pairs of chromosomes, or 46 total chromosomes. 22 of those chromosome pairs are autosomal, and 1 pair of chromosomes is the sex pair (XY or XX).

### Chromosomes are found in the nucleus

[Chrome-Chromosomes found in Nuclear-Nucleus](#)

Chromosomes and DNA are both found in the nucleus of cells. If DNA was to leave the nucleus, it would be destroyed in the cytoplasm of cells.