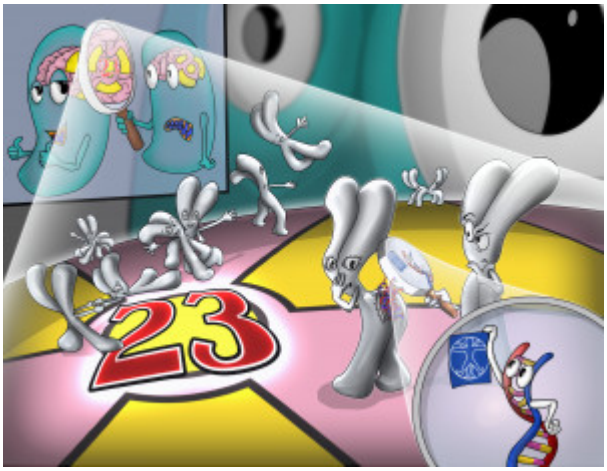
Chromosome and DNA

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.



PLAY PICMONIC

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.