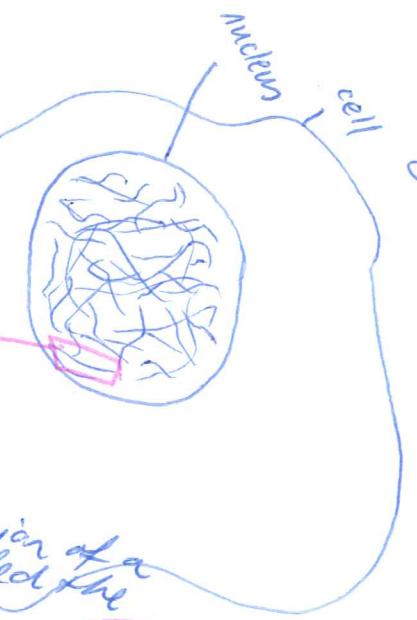


DNA & Chromosomes

- Read page 270 top part.



Alternative forms of the same gene are called alleles. A normal organism has two alleles for each gene. If one allele is dominant it掩盖s the other. e.g. brown eyes have blue eyes. One is dominant and the other is recessive.



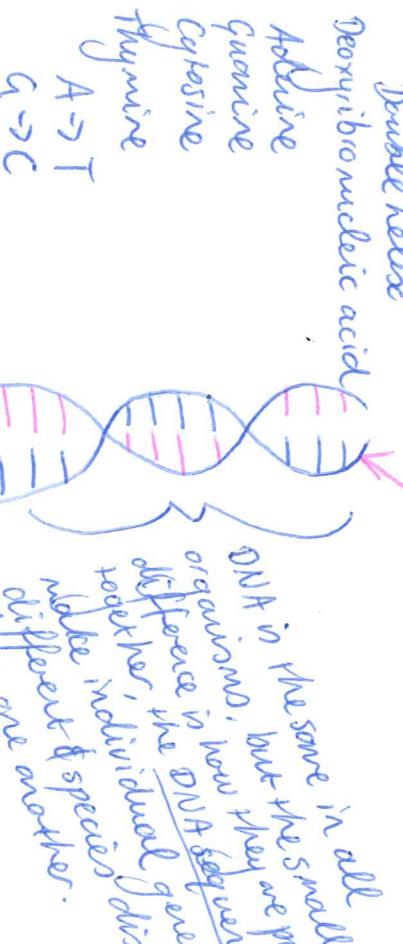
These give instructions that control how you grow.

The Human Genome Project was completed in 2003 by the HGP through the use of rapidly advancing technology. It was discovered that human genomes have 3 billion nucleotide base pairs with approximately 30,000 - 35,000 genes. The next phase is to figure out what every gene actually does.

- Read genomic research pg. 273
- Discuss comparative genomics i.e. chimp vs. human & bioinformatics.
- Hap & chromosome worksheets.

→ Read pg. 273 → 274 & review karyotypes with w/sheet

- ① Create a table which compares eukaryotic DNA to prokaryotic DNA.
- ② Summarise chloroplast DNA & mitochondrial DNA.



A \rightarrow T
G \rightarrow C

The study of patterns of inheritance

Geneticists are scientists that study genetics. Genetics is simply the study of heredity & heredity is the process of passing the characteristics of one generation to the next generation by sexual or asexual reproduction.

The sum of all the DNA in the cell of an organism, measured in the number of nucleotide base pairs contained in a haploid set of chromosomes, is its genome.

Genes differ between species but there may be similarities, the study of genes is called genomics.

In the same organism, but the sequence of DNA is different, the DNA sequence makes the difference. Individual genes together make individual organisms distinct from one another.