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Molecular basis of inheritance

Human Genome Project

The human genome project was launched to sequence the entire human genome of 2.75 billion base pairs. The main goals of the human genome project are:

- To provide a complete sequence of 3 billion base pairs that make up the human genome.
- To sequence the genome of other organisms that are used in medical research. For eg, mouse, flies, etc.
- To develop new tools to obtain and analyse the data and to make this data widely available.
- It holds prospects for healthier living, a database of knowledge about designer drugs, genetically modified diets, and genetic identity.

Draw : **Structure of RNA**

Frequently Asked Questions

What is the molecular basis of inheritance?

Molecular basis of inheritance involves the study of genes, genetic variations and heredity. It explains how an offspring looks similar to the parents. DNA, RNA and genetic code form the basis of the molecular basis of inheritance. They transmit the hereditary genes from the parents to the offspring.

How does DNA play a role in the molecular basis of inheritance?

DNA carries all the genetic information of an individual. When it replicates each strand gives rise to a daughter strand and passes the genetic information to it. This way it forms the basis of inheritance.