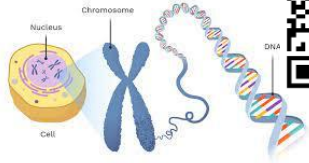


Inheritance

Threshold Concept

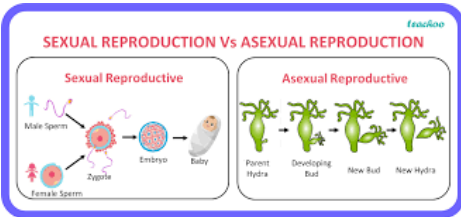
Organisms pass on their DNA in order to survive.

DNA



DNA is found in the nucleus of cells and contains all the genetic material to make the organism

Sexual and asexual reproduction



There are two main forms of reproduction: sexual and asexual reproduction. In sexual reproduction, an organism combines the genetic information from each of its parents and is genetically unique. In asexual reproduction, one parent copies itself to form a genetically identical offspring

Keywords

Cell..... The smallest unit that can live on its own and makes up all living organisms

Nucleus The organelle inside cells that contains the cells genetic material

DNA..... The molecule inside cells that contains all the genetic information responsible for the development and function of an organism

Chromosomes..... A structure made up of proteins and DNA organised into genes inside the nucleus of a cell

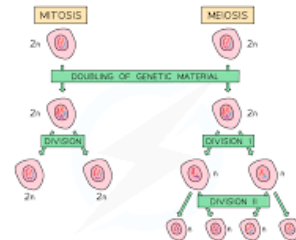
Gene Genes carry information that determine what characteristics are inherited from an organism's parents

Reproduction..... The production of offspring

Mitosis / Meiosis

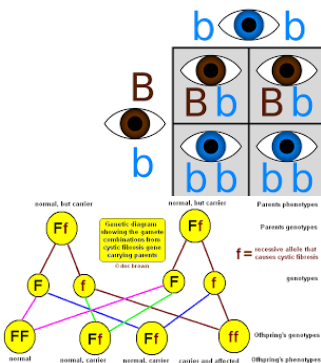
Mitosis is a form of cell division which produces two identical, diploid body cells.

Meiosis is a form of cell division which produces four non-identical, haploid sex cells or gametes (sperm and ova in humans)

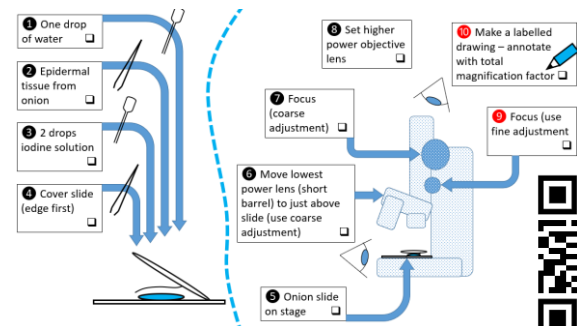


Genetic cross diagrams

Genetic crossing describes breeding two selected individuals so their offspring can be studied to understand how a particular trait is inherited down the generations.



Required Practical



Equations for this topic

Image size = actual size x magnification