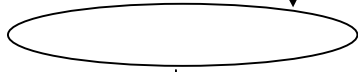


# The Cell and Inheritance

Gregor Mendel hypothesized that there were "heredity factors that were responsible for the traits that are passed from parent to offspring called



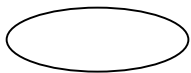
Walter Sutton noticed that grasshopper sex cells had 1/2 th number of



Comparing this with the body cells, where these are found in



The number in Humans is



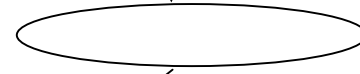
He concluded that these were the carriers of Mendel's "heredity factors. It was later discovered that these were made of



A second kind of cell division called



Produces sex cells or another name for them are



The 4 stages of this kind of cell division are



All the chromosomes are copied in this stage.

Chromosome pairs line up then separate and migrate to each side of the cell. A new nucleus forms around the regions of chromosomes and the cell divides into two new cells during this stage.



A second division begins when the chromosomes separate into chromatids and migrate to each side of the cell during this stage.



Finally 4 sex cells are produced with 1/2 the chromosomes at this stage

