### 3.1 Meiosis

In multicellular creatures there are 2 main types of cells: $\qquad$ cells and
$\qquad$ cells
cell: cells that contain the full amount of chromosomes ( $\qquad$ These are also called body cells
$\qquad$ cells: cells that contain half the amount of chromosomes ( $\qquad$

These are also called $\qquad$ . Male $\qquad$ are called
$\qquad$ and female $\qquad$ are called $\qquad$ _.

The process of making new $\qquad$ cells is mitosis. But making
$\qquad$ is a little different, mainly because you need the newly made cells to have $\qquad$ the number of chromosomes as the original. The process of making gametes is called $\qquad$ .

Remember: the "full amount" of chromosomes in an organism can be represented by "____" while half the number of chromosomes is "____"
$2 \mathrm{n}=$ $\qquad$ cells $=$ $\qquad$ cells
$\mathrm{n}=$ $\qquad$ cells = $\qquad$

Remember that you get two versions of each chromosome: one from your mom and one from your dad. Each of these are called $\qquad$ chromosomes.

Do not confuse $\qquad$ with $\qquad$
_ = exact copies of each other
genetically identical $=$ two different versions of the same traits. Not genetically identical

The goal of mitosis: $\qquad$

The goal of meiosis: $\qquad$
Meiosis acts in a similar way to mitosis. However, meiosis has two "cycles" to it.
Prophase I, Metaphase I, Anaphase I, and Telophase I
Then there is a second round of divisions
Prophase II, Metaphase II, Anaphase II, and Telophase II

Note: $\qquad$ takes place after Telophase I and after Telophase II

The reason this works is because DNA is $\qquad$ between meiosis I and meiosis II.

At the end of meiosis II you have a total of $\qquad$ new cells, but each cell has only the number of chromosomes that the parent cell had.

