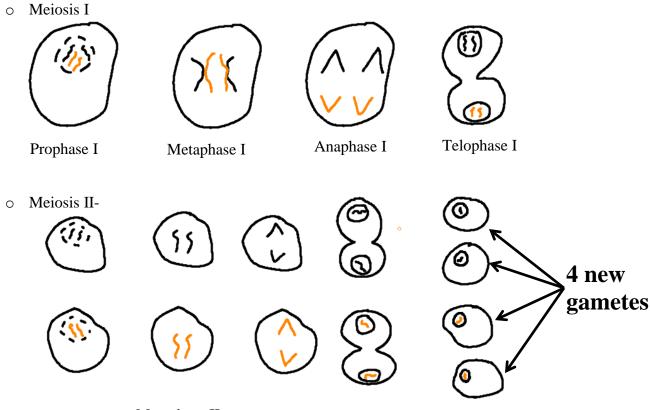
## **Genetics Part III-Meiosis**

- Reproduction is the process of creating new organisms
- There are 2 types:
  - o Asexual Reproduction-DNA comes from only 1 parent to make a new organism
  - o Sexual Reproduction-DNA is combined from 2 parents to make a new organism
- Most organisms have 2 main types of cells
  - o Somatic cells-are the normal body cells that do everything that organisms need to live
  - o Gametes-are special cells that the organism uses to reproduce
- In somatic cells, organisms have 2 copies of each chromosome
  - One comes from their dad
  - One comes from their mom
- If a cell has extra copies of chromosomes, it creates problems for the cell
- To prevent these problems, cells go through a special process called **meiosis** to make sure that their offspring do not have too many chromosomes
- The purpose of Meiosis is to make 4 cells that each have 1 copy of every chromosome for an organism
- Meiosis looks a lot like mitosis, but it happens twice
- It happens in 2 parts:



Prophase II Metaphase II Anaphase II Telophase II