

## MODELING WITH BEADS or PIPE CLEANERS (Simplified)

Directions: Work with your lab group to demonstrate your understanding. Do not be afraid to admit you don't know - ASK - this activity is designed to check for understanding and to fill in your gaps in understanding and correct any misconceptions.

Decide how you will represent homologous chromosomes. Represent 3 homologous pairs of chromosomes. Each will be a different length. Everyone starts with  $2n = 6$ .

Create a model and give a verbal description to explain the process or situations below to your partner. Check them off as you complete each one.

- A cell in Prophase of mitosis
- A cell in Metaphase of mitosis
- A cell in Metaphase I of meiosis
- A cell in Anaphase I of meiosis
- A cell in Anaphase II of meiosis
- A cell in Metaphase II of meiosis
- The Law of Independent Assortment
- Cells in Prophase II are haploid
- Nondisjunction during Meiosis I
- Nondisjunction during Meiosis II
- The Law of Segregation