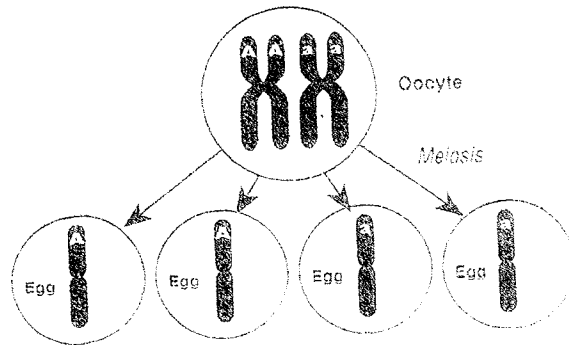


V. Mendel's Laws of Segregation and Independent Assortment

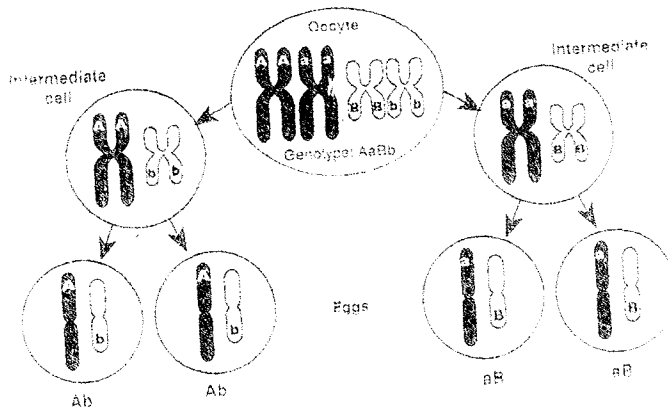
A. Law of Segregation

- Organisms contains _____ (genes) for each trait.
- Alleles _____ (separate) during formation of _____ (egg/sperm)



B. Law of Independent Assortment

- Alleles for one trait are _____
- Each trait is _____



C. Genetics and Probability

- _____ is the chance that a certain event will occur.
- Mendel's laws of segregation and independent assortment reflect the same laws of probability that apply to tossing coins or rolling dice.

D. Calculating the chance of having and offspring with certain alleles is just like calculating the probability in flipping a coin.

- Probability of tossing heads? _____
- Probability of making a B or b gamete? _____

E. Outcome of 1 toss has no impact on the outcome of the next toss.

- Probability of tossing heads each time? _____
- Probability of making a B or b gamete each time? _____