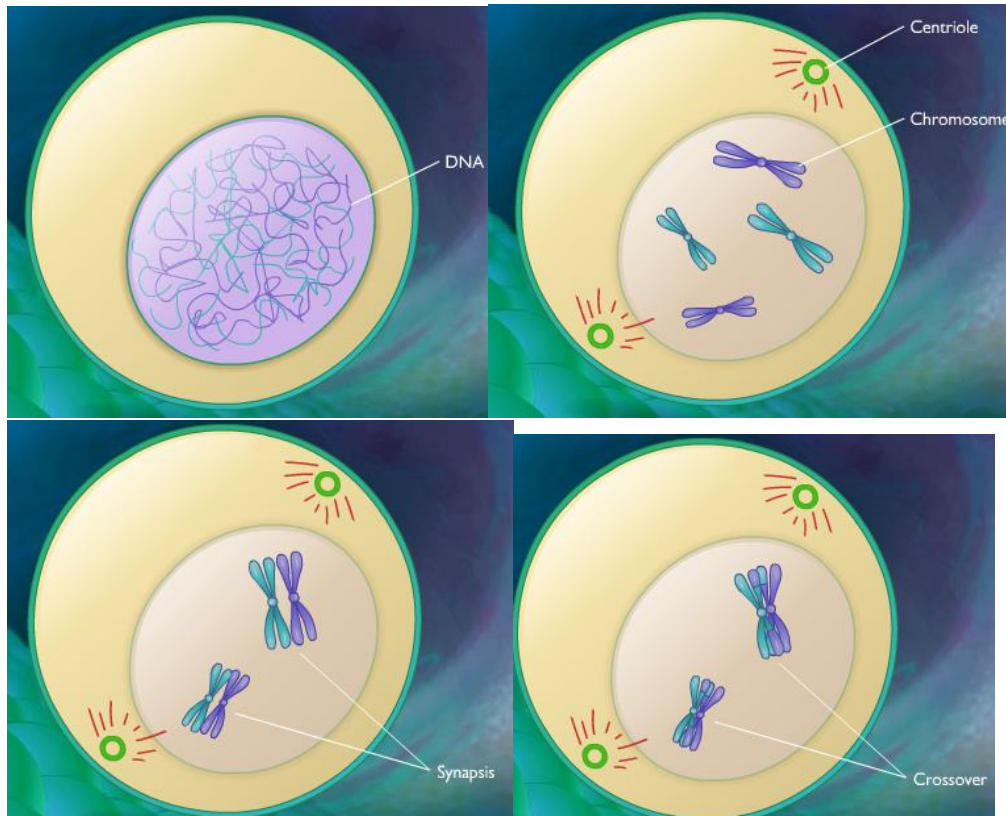
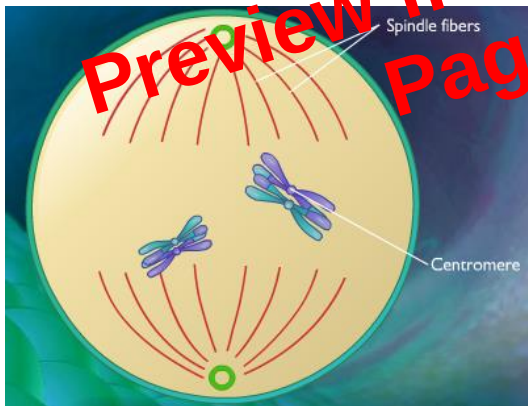




Metaphase 1: The nuclear membrane then disappears and then the microtubules from a spindle. The spindle fibres then attach to only one side of each centromere. After that the two homologous chromosome attach themselves to microtubules aligning from opposite poles.



Anaphase 1: The microtubules of the spindle fibre shorten and then pull the chromosomes towards the poles; therefore taking both of the sister chromatids with them.

each of the four gametes produced, even though the two homologous chromosomes contain the same genetic information. There are many numbers of combinations that these alleles in the gametes could produce.

Crossing Over

When meiosis occurs, on the homologous chromosomes, there are points along them that make contact with the other pair; they are paired together. This point of contact is called the chiasmata; it allows the exchange of genetic information between chromosomes. Therefore further increasing the genetic variation.

Prophase 1: Firstly, the DNA coils and then homologous chromosomes become joined together in synapsis; they exchange sections by crossing over.

