

- The bivalents become arranged around the equator of the spindle

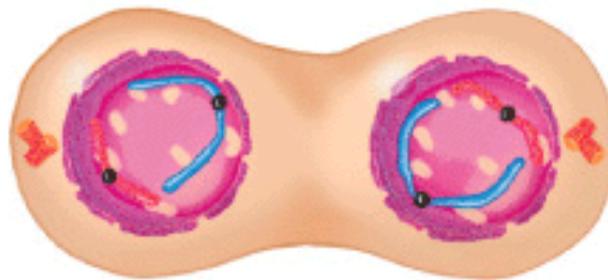
### **3. Anaphase I**

- Spindle fibres contract and pull homologous chromosomes towards opposite poles of the spindle – this separates the chromosomes into two haploid sets.

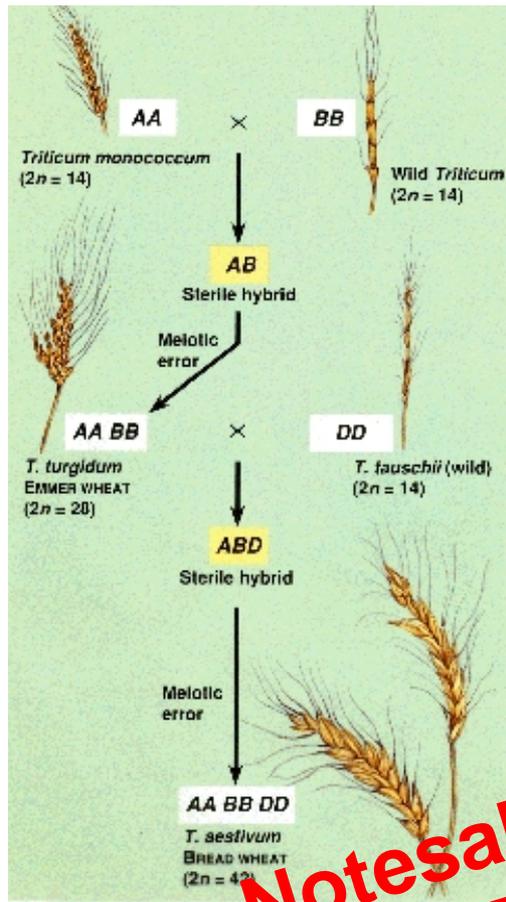


### **4. Telophase I**

- Homologous chromosomes reach opposite poles- chromosomes still made of two chromatids. Crossing over has also occurred so these chromatids are not genetically identical and must be separated in a second meiotic division



- Spindle fibres usually disappear in animal cells and some plants
- Nuclear envelope reforms around each set of chromosomes – each set contains one member of each pair of homologous chromosomes
- Nucleoli reappear



Allopolyploidy does not occur in animals because there are fewer instances of cross-breeding between species. It does not add new genes to a gene pool but gives rise to a new combination of genes.