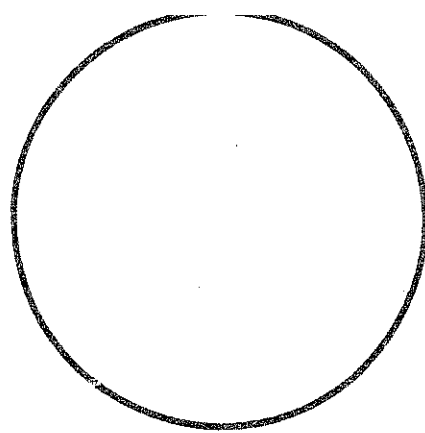
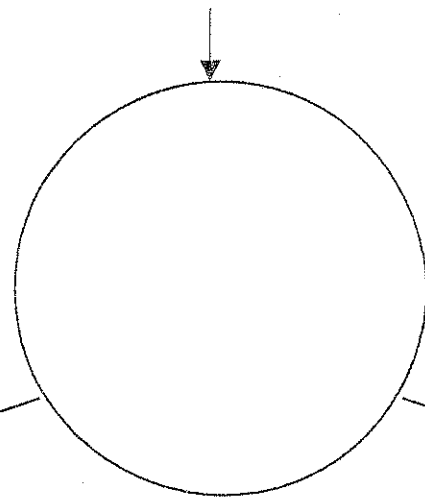


Interphase

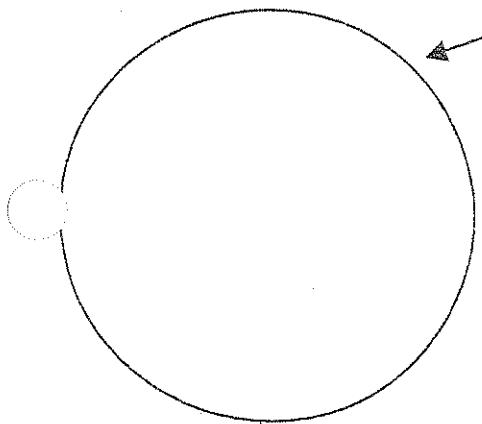
Original cell (2N)



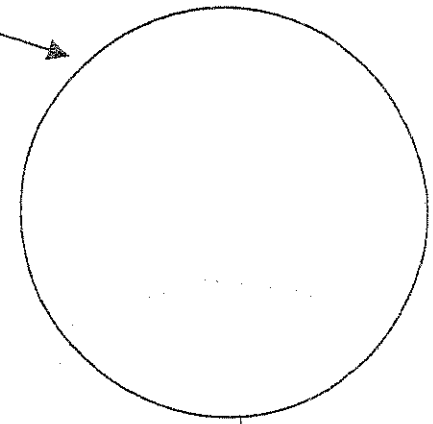
DNA Replication



Homologous chromosomes line up in the center (2N)

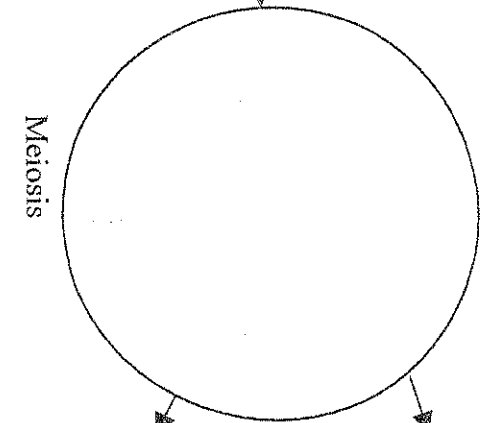


Two new cells are created each with half the number (N) of chromosomes as the original cell

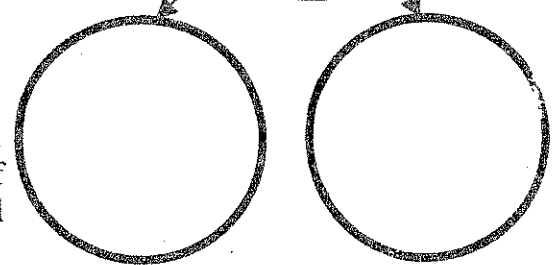
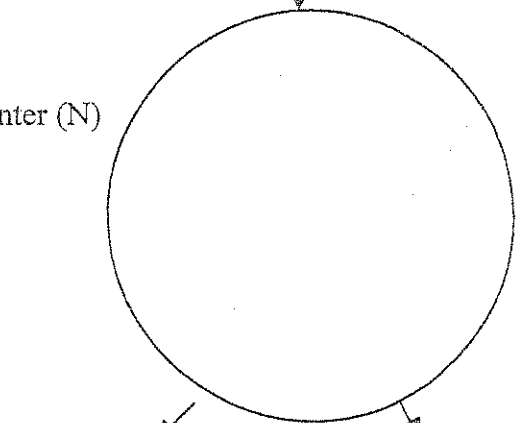
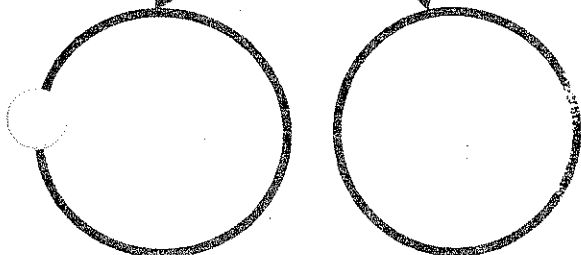


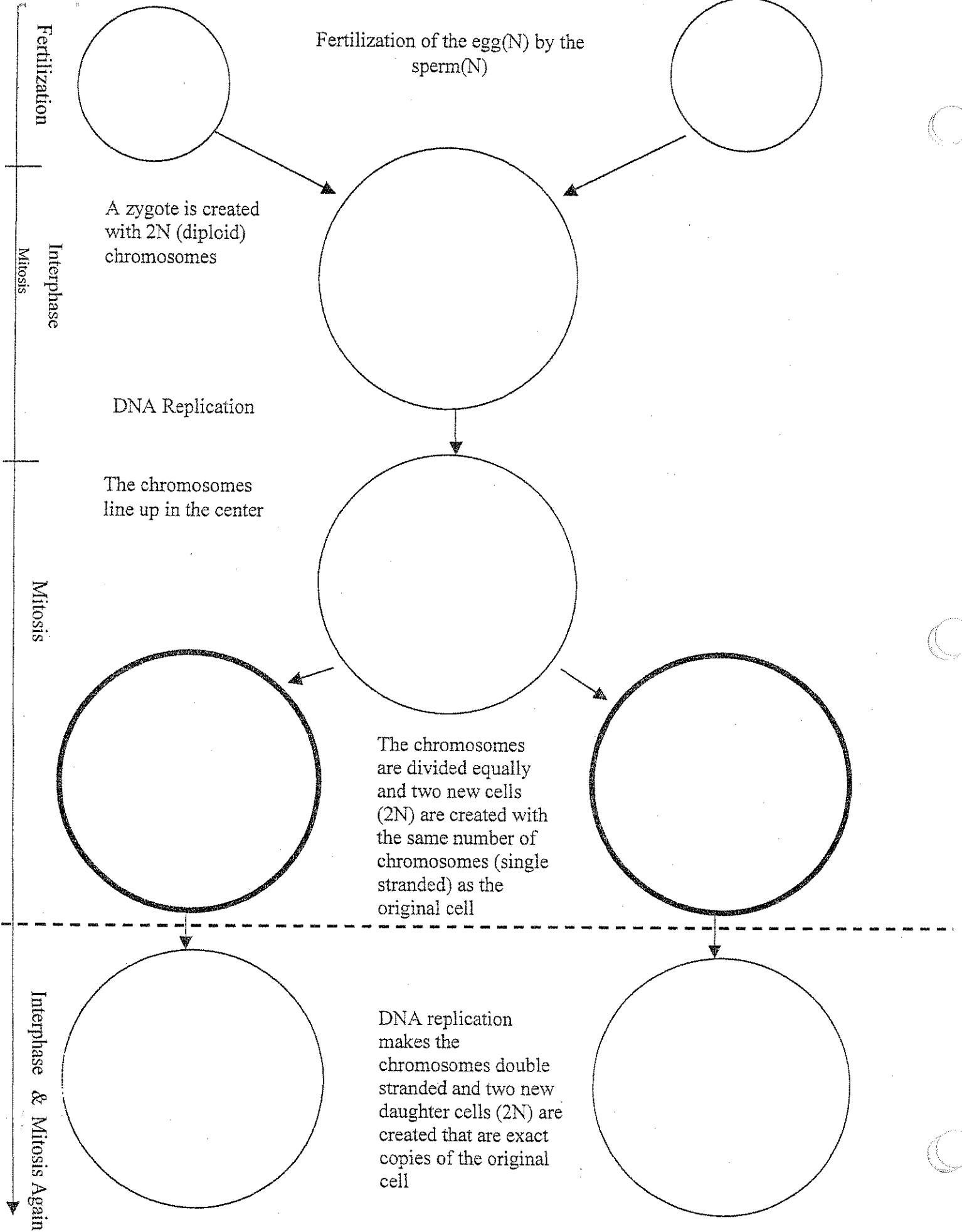
Meiosis

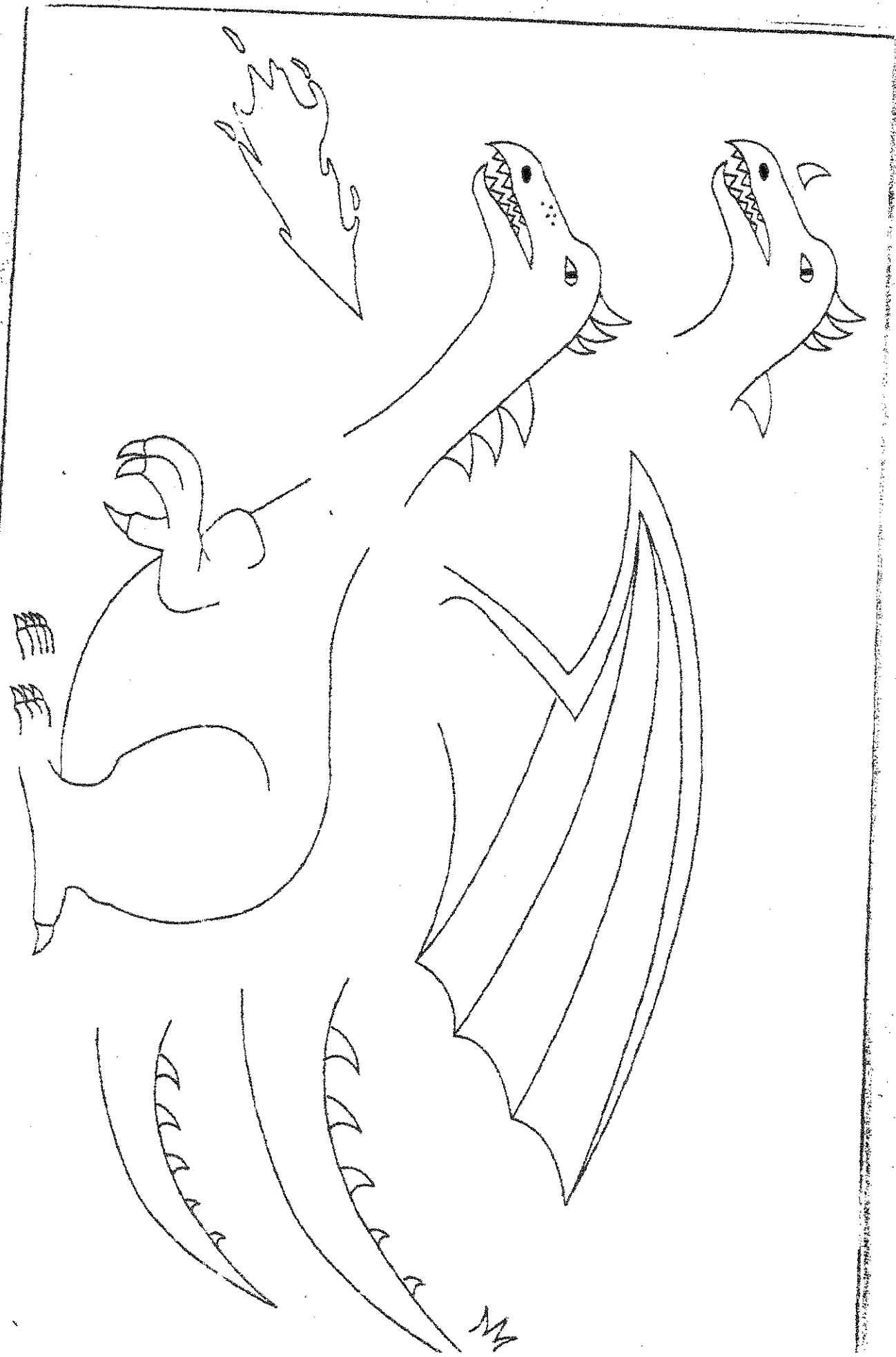
Chromosomes line up in the center (N)



Four gametes (N) are created Each with half the number of chromosomes as the original cell







Chromosome #	Trait	Parent Genotype	Parent Phenotype	Baby Genotype	Baby Phenotype
1	Neck length				
1	Eye color				
1	Horn present				
1	Spike present				
2	Tail length				
2	Body color				
2	Wing color				
2	Toe number				
3	Belly color				
3	Spike color				
3	Freckles				
4	Fire breathing				
4	Gender				

N-long neck      T-three toes      R-red wings      K-freckles      XX-female      F-fire breathing      E-red eyes  
 n-short neck      t-four toes      r-yellow wings      k-no freckles      XY-male      f-not fire breathing      e-white eyes  
 W-yellow belly      B-spikes on tail      G-green body      L-long tail      B-black spikes      H-horn  
 w-white belly      b-no spikes on tail      g-grey body      l-short tail      b-red spikes      h-no horn