**Questions to answer:**

1. Define “non-disjunction”.  Why can this be a problem during meiosis?
2. How is Down’s Syndrome diagnosed?
3. Why is having an extra Chromosome 21 tolerable to the point that someone with this condition can survive to maturity?
4. Why is having an extra Chromosome 21 deleterious to the person who has this condition?
5. Compare and contrast the following chromosomal syndromes:
   1. Kleinfelter’s Syndrome
   2. Jacob’s Syndrome
   3. Trisomy X
   4. Turner’s Syndrome
6. Explain what happens during each of the following chromosomal mutations:
   1. Deletion
   2. Duplication
   3. Inversion
   4. Translocation