- Crossing over is known as recombination, then chromosomes are called 'recombinants'
- Meiosis 1- cohesion breaks down part but centromere, it breaks centromere at meiosis 2
- An example of a microtubule is spindle fibres, try referring to microtubules and give the example of spindle fibres. This is because spindle fibres are just one type of microtubule, as the composition of protein in it make it a spindle fibre. Other microtubules have different abundance of proteins.
- The cell division duration depends on organisms. E.g. in a fly it is 8 hours, whereas in humans it is 24 hours
- DNA content is halved in meiosis I and ii, but the ploidy changes from diploid to haploid in meiosis I but remains haploid in meiosis II. During anaphase of both M1 and M2, the DNA content (number of chromosomes in a cell) is halved, although the ploidy level changes only when the number of chromosome sets in the cell change. This occurs in M1, where separation of the homologous chromosomes changes the ploidy level from 2n to n and produces daughter cells with a single chromosome set.
- Variation and heredity is characterised by;

(Random assortment/ independent alignment at Metaphase and anaphase) Fertilisation increases genetic variation by randomly combining two sets of chromosomes, one of each from 2 genetically unrelated organisms Also **mutations** can also cause change and are another cause of variation and cause disabilities ((remember mutations can cause cancer in somatic (1)).

- Genetic variation increases the chance of evolution Contract selection can favour the organisms that are better adapted to the the managing environment
- Recombination causes charmed plimation- the genetic material from one parent changes to the other parent's caretic background
- Aneuploidy- cells with more or less DwA than normal e.g. Downs Syndrome
- Polyploidy- cells with many genomes e.g. human agriculture- plants produce larger fruits and flowers and seedless fruits which is great commercially
- The possible daughter cells; you can predict this from metaphase I diagrams- try this and see if you get the right answers!