**Speciation**

1. Variation = exists within a population sharing a common gene pool
2. Isolation/barrier to gene flow = leads to reproductive isolation (no interbreeding), now there are populations with separate gene pools
3. Selection = Different selection pressures act on each population which favour different alleles and thus changing allele frequency. The change leads to the evolution of subspecies
4. Speciation = occurs over many generations whereby interbreeding to produce fertile offspring is no longer possible due to a great difference in gene frequencies