## SL Paper 1

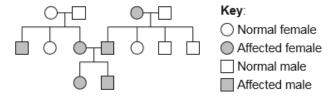
What happens in crossing over?

- A. Exchange of genetic material between homologous chromosomes
- B. Exchange of genes during metaphase of mitosis
- C. Random distribution of chromosomes during meiosis
- D. Homologous chromosomes fail to separate during meiosis

During which stage of meiosis does crossing over usually occur?

- A. Prophase I
- B. Metaphase I
- C. Prophase II
- D. Metaphase II

The diagram shows a pedigree chart.



What does it reveal about the inheritance of the blood disorder beta-thalassaemia?

- A. The allele is autosomal recessive.
- B. The allele is autosomal dominant.
- C. The allele is sex-linked.
- D. The allele is co-dominant.

Which structure found in eukaryotes has a single membrane?

- A. Nucleus
- B. Lysosome
- C. Chloroplast
- D. Mitochondrion