What is an allele?

- Each gene exists in two forms called an allele.
- Each individual inherits one allele from each of its parents.
- Alleles may be the same or may be different.
- When different, each allele codes for a different polypeptide.
- Any difference in the base sequence of an allele may result in a different sequence of amino acids being coded for.
- Leads to production of a different polypeptide chain.
- Leads to production of a different protein.
- This protein may be an enzyme which now has a different tertiary structure and cannot form an enzyme-substrate complex meaning it is no longer functional.

