## Genes [EXTRA]

⇒ Inherited, metabolic diseases caused by failure of body's normal set of chemical reactions:

- Sickle cell anaemia mutation of beta-globin chain of haemoglobin where the amino acid glutamic acid is replaced with the hydrophobic amino acid valine. This promotes polymerisation of haemoglobin altering shape and elasticity of molecule.
- ⇒ Cystic fibrosis recessive hereditary disease causing an over-production of mucus.

