



Use this alongside our Walkthrough Guides to tick off the concepts you're confident with to plan your study and find areas of improvement!

DNA

- I can define, describe and explain the structure of DNA
- I can list the two sets of base pairs
- I can define and describe **chromosomes**
- I can define and describe **alleles**
- I can describe the link between DNA, genes and alleles
- I can describe and explain the difference between phenotype and genotype
- I can describe and explain the effect of mutations
- I can describe and explain the difference between heritable and inheritable traits
- I can describe meiosis and mitosis

Genotype and Phenotype

- I can describe the terms **homozygous dominant** and **recessive**
- I can describe the term **heterozygous**
- I can use Punnett squares to predict the genotype and phenotype of the offspring
- I can use a pedigree chart to predict the genotype of an organism
- I can use Punnett squares to predict the ratio of genotypes and/or phenotypes in an offspring

Genetic Variation

- I can describe and explain the differences between sexual and asexual reproduction
- I can describe and explain the importance of variation in a population
- I can describe and explain the advantages and disadvantages of sexual and asexual reproduction