AQA Biology GCSE Student Checklist

B12 Reproduction

Name ..... Class ..... Date .....

Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
B12.1 Types of reproduction	I can define asexual and sexual reproduction.	☐	I can describe the differences between asexual and sexual reproduction.	☐	I can compare and contrast sexual and asexual reproduction.	☐
	I can name some organisms that use either asexual or sexual reproduction.	☐	I can describe the advantages and disadvantages of sexual and asexual reproduction.	☐	I can explain in detail why meiosis is important for sexual reproduction.	☐
	I can use a model to show why variation is produced in offspring from sexual reproduction but not in asexual reproduction.	☐	I can design a model to show why variation is produced in offspring from sexual reproduction but not in asexual reproduction.	☐	I can evaluate a model to show that variation is produced in offspring from sexual reproduction but not in asexual reproduction.	☐
B12.2 Cell division in sexual reproduction	I can state that gametes (sex cells) are formed by meiosis.	☐	I can describe the processes of mitosis and meiosis.	☐	I can compare and contrast mitosis and meiosis.	☐
	I can state that meiosis halves the number of chromosomes in gametes and fertilisation restores the full number.	☐	I can explain how meiosis halves the number of chromosomes in gametes and fertilisation restores the full number.	☐	I can explain in detail why gametes are all genetically different to each other.	☐
	I can solve simple probability questions with guidance.	☐	I can solve simple probability questions.	☐	I can solve a complex calculation to determine the number of possible gametes formed during meiosis.	☐
B12.3 DNA and the genome	I can state that DNA contains a code to build proteins.	☐	I can describe the relationship between DNA, genes, and chromosomes.	☐	I can explain why the cost of genome sequencing has reduced since it started.	☐
	I can describe what the Human Genome Project was.	☐	I can describe some of the benefits of studying the human genome.	☐	I can explain why knowledge of the genomes of other species is useful.	☐
	I can give one goal of the Human Genome Project.	☐	I can explain why genome projects are costly and take a long time.	☐	I can discuss the possible issues surrounding genome sequencing.	☐

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B12.4 Inheritance in action	I can recognise examples of inherited traits.	☐	I can use the terms allele, dominant, recessive, homozygous and heterozygous correctly.	☐		
	I can recognise a genotype and a phenotype.	☐	I can describe a phenotype when given the genotype.	☐		
	I can use a simple diagram to state how offspring have inherited traits.	☐	I can use a Punnett square diagram to predict the outcome of a monohybrid cross using the theory of probability.	☐		
B12.5 More about genetics	I can state that in females the sex chromosomes are XX and in males they are XY.	☐	I can carry out a genetic cross to show sex inheritance.	☐	I can explain why we only get the expected ratios in a genetic cross if there are large numbers of offspring.	☐
	I can use a family tree to describe how people are related.	☐	I can use direct proportion and simple ratios to express the outcome of a genetic cross.	☐	I can use a family tree to work out where an individual is likely to be homozygous or heterozygous for particular alleles.	☐
B12.6 Inherited disorders	I can state what is meant by an inherited disorder and recognise examples.	☐	I can name examples of inherited disorders, such as cystic fibrosis and polydactyly.	☐	I can evaluate in to detail the use of using genetic engineering to cure inherited disorders.	☐
	I can use secondary sources of information to describe symptoms of an inherited disorder.	☐	I can use a genetic cross to explain how inherited disorders are passed on.	☐	I can use a genetic cross to predict the probability of a child inheriting an genetic disorder.	☐
B12.7 Screening for genetic disorders	I state a reason why embryos might be screened.	☐	I can outline the methods used to screen embryos.	☐	I can explain how screening shows if the embryo has a genetic disorder.	☐
	I can state one concern about embryo screening.	☐	I can state advantages and disadvantages of embryo screening.	☐	I can make an informed judgement about embryo screening by evaluating in detail the economic, social and ethical issues.	☐