

Year 9 Biology

NB Although “triple only” content is flagged up here, it is all taught to Year 9 as decisions about course have not yet been made.

Lesson	Unit	Lesson Topic	Assessment
1	B1a Cells	Types of Cell	
2		Animal Cells	
3		Plant Cells	FAR marking of lab books RP1
4		Specialised Cells	
5		Microscopy	
6	B1b Transport	Diffusion	
7		Diffusion in Different Organisms	FAR marking of extended response exam question
8		Osmosis	
9		Required Practical 3 (Osmosis in Potatoes)	(Pupils can self-assess in lab books.)
10		Active Transport	
11		Cells and Transport Topic DTT	FAR marking of end of topic test.

Lesson	Unit	Lesson Topic	Assessment
1	B2 Cell Division	Cell Division	
2		Growth and Differentiation	
3		Stem Cells and Their Uses	
4		Cell Division Topic DTT	FAR marking of end of topic test.

Lesson	Unit	Lesson Topic	Assessment
1	B3 Digestion	Tissues and Organs	
2		The Human Digestive System	
3		The Chemistry of Food	FAR marking of required practical 4 (food testing)
4		Catalysts and Enzymes	
5		Factors Affecting Enzyme Action	
6		How the Digestive System Works	
7		Required Practical 5 (effect of pH on enzyme action)	(Pupils to self-assess)
8		Bile	
9		Digestion Topic DTT	FAR marking of end of topic test.

Lesson	Unit	Lesson Topic	Assessment
1	B4 Organisation	The Blood	
2		Blood Vessels	FAR marking of exam question on blood vessels.
3		The Heart	
4		Helping the Heart	
5		Breathing and Gas Exchange	
6		Tissues and Organs in Plants	
7		Transport Systems in Plants	
8		Evaporation and Transpiration	
9		Factors Affecting Transpiration	
10		Organisation Topic DTT	FAR marking of end of topic test.

Lesson	Unit	Lesson Topic	Assessment
1	B5	Health and Disease	
2	Communicable Disease	Pathogens and Disease	
3		Growing Bacteria (Triple Only)	FAR marking of work in lab books related to the required practical.
4		Preventing Bacterial Growth (Triple Only)	
5		Preventing Disease	
6		Viral and Bacterial Diseases	Optional extra FAR marking of exam question on TMV.
7		Diseases Caused by Fungi and Protists	
8		Human Defence Responses	
9		Plant Diseases (Triple Only)	
10		Plant Defence Responses (Triple Only)	
11			Communicable Disease DTT

Year 10 Biology

Lesson	Unit	Lesson Topic	Assessment
1	B6 Preventing Disease	Vaccination	
2		Antibiotics and Painkillers	
3		Discovering Drugs	
4		Developing Drugs	FAR marking of drug testing exam question.
5		Monoclonal Antibodies (Triple Only)	

Lesson	Unit	Lesson Topic	Assessment
1	B7 Non-Communicable Disease	Cancer	
2		Smoking and Disease	
3		Diet, Alcohol, and Disease	FAR marking of exam question on diet.
4		Preventing and Non-Communicable Disease Topics DTT	FAR marking of DTT end of topics test.

Lesson	Unit	Lesson Topic	Assessment
1	B8 Photosynthesis	Photosynthesis	
2		The Rate of Photosynthesis	FAR marking of required practical 6.
3		How Plants Use Glucose	

Lesson	Unit	Lesson Topic	Assessment
1	B9 Respiration	Aerobic Respiration	
2		The Effects of Exercise	FAR marking of exam question on exercise.
3		Anaerobic Respiration	
4		Metabolism and the Liver	
5		Photosynthesis and respiration Topics DTT	FAR marking of DTT end of topics test.

Lesson	Unit	Lesson Topic	Assessment
1	B10 Nervous System	Principles of Homeostasis	
2		The Structure and Function of the Human Nervous System	FAR marking of required practical 7.
3		Reflex Actions	
4		The Brain (Triple Only)	
5		The Eye (Triple Only)	FAR marking of exam question on the pupil reflex.
6		Common Problems of the Eye	

Lesson	Unit	Lesson Topic	Assessment
1	B11 Hormones	Principles of Hormonal Control	
2		The Control of Blood Glucose Levels	FAR marking of blood sugar exam question.
3		Treating Diabetes	
4		The Role of Negative Feedback	
5		Human Reproduction, Hormones, and the Menstrual Cycle	

6		The Artificial Control of Fertility	
7		Plant Hormones and Responses (Triple Only)	FAR marking of lab book work on the triple-only required practical.
8		Using Plant Hormones	
9		Nerves and Hormones DTT	FAR marking of DTT end of topics test.

Lesson	Unit	Lesson Topic	Assessment
1	B12 Homeostasis	Controlling Body Temperature	FAR marking of temperature regulation exam question.
2	(WHOLE TOPIC TRIPLE ONLY)	Removing Waste Products	
3		The Human Kidney	
4		Dialysis and Kidney Transplants	
5		Homeostasis DTT	FAR marking of DTT end of topic test.

NB The Reproduction topic is only taught to Combined Science groups in Year 10. Triple award groups finish after Homeostasis.

Lesson	Unit	Lesson Topic	Assessment
1	B13	Types of Reproduction	
2	Reproduction	Cell Division in Sexual Reproduction	FAR marking of reproduction exam question.
3		The Best of Both Worlds (Triple Only)	
4		DNA and the Genome	
5		DNA Structure and Protein Synthesis (Triple Only)	Triple award teachers might like to include an extra FAR marked DNA question due to the length of this topic.
6		Gene Expression and Mutation (Triple Only)	
7		Inheritance in Action	
8		More About Genetics	
9		Inherited Disorders	
10		Screening for Genetic Disorders	
11		Reproduction DTT	FAR marking of DTT end of topic test.

Year 11 Biology

NB Reproduction is the first topic for Triple groups ONLY. Combined Science studied this at the end of Year 10.

Lesson	Unit	Lesson Topic	Assessment
1	B13 Reproduction	Types of Reproduction	
2		Cell Division in Sexual Reproduction	FAR marking of reproduction exam question.
3		The Best of Both Worlds (Triple Only)	
4		DNA and the Genome	
5		DNA Structure and Protein Synthesis (Triple Only)	Triple award teachers might like to include an extra FAR marked DNA question due to the length of this topic.
6		Gene Expression and Mutation (Triple Only)	
7		Inheritance in Action	
8		More About Genetics	
9		Inherited Disorders	
10		Screening for Genetic Disorders	
11		Reproduction DTT	FAR marking of DTT end of topic test.

Lesson	Unit	Lesson Topic	Assessment
1	B14 Variation	Variation	
2		Natural Selection	
3		Selective Breeding	FAR marking of selective breeding exam question
4		Genetic Engineering	
5		Cloning, Adult Cell Cloning, and Ethics (Triple Only)	

Lesson	Unit	Lesson Topic	Assessment
1	B15 Evolution	The History of Genetics (Triple Only)	
2		Theories of Evolution (Triple Only)	
3		Evolution and Speciation (Triple Only)	
4		Evidence for Evolution	FAR marking of fossils exam question
5		Extinction and Antibiotic Resistance	
6		Classification	
7		Variation and Evolution DTT	FAR marking of DTT end of topics test.

Lesson	Unit	Lesson Topic	Assessment
1	B16 Adaptation	Communities	
2		Distribution and Abundance	FAR marking of Required Practical 9.
3		Competition	
4		Adaptation	

Lesson	Unit	Lesson Topic	Assessment
1	B17 Ecosystems	Feeding Relationships	
2		Materials Cycling	
3		Rates of Decomposition (Triple Only)	FAR marking of Required Practical 10.
4		Adaptation and Ecosystems DTT	FAR marking of DTT end of topics test.

Lesson	Unit	Lesson Topic	Assessment
1	B18 Biodiversity	The Human Population Explosion	
2		Land, Water, and Air Pollution	FAR marking on one of the exam questions from the student booklet (the rest are self-assessed)
3		Deforestation, Peat Destruction, and Global Warming	
4		The Impact of Change (Triple Only)	
5		Trophic Levels and Biomass Transfers (Triple Only)	
6		Food Security and Production (Triple Only)	
7		Biodiversity DTT	FAR marking of DTT end of topic test.