

2018-19	Topic area	Lesson title	Practicals
03/09/2018	B1 Overarching concepts in Biology	SB1a: Microscopes	Students use microscopes to examine pre-prepared slides of small objects (e.g. hair, pollen). (See Exploring.)
		SB1a: Microscopes	
		SB1b: Plant and animal cells	Core Practical: Investigate biological specimens using microscopes, including magnification calculations and labelled scientific drawings from observations. (See Exploring.)
		SB1b: Plant and animal cells	
17/09/2018		SB1c: Specialised cells	Demonstrate the effect of surface area using Visking tubing. (See Exploring.)
		SB1d: Inside bacteria	Students use a microscope to examine live yoghurt cultures to look for bacteria. (See Exploring.)
		SB1d: Inside bacteria	
		SB1e: Enzymes and nutrition	Suggested practical: Investigate the effect of different concentrations of digestive enzymes, using and evaluating models of the alimentary canal. (See Exploring and Explaining.)
		SB1e: Enzymes and nutrition	
		SB1f: Testing foods	Core practical: Investigate the use of chemical reagents to identify starch, reducing sugars, proteins and fats.
01/10/2018		SB1f: Testing foods	
		SB1g: Enzyme action	Suggested practical: Investigate the effect of temperatures and concentration on enzyme activity. (See Exploring and Explaining.)
		SB1g: Enzyme action	
		SB1h: Enzyme activity	Core Practical: Investigate the effect of pH on enzyme activity. (See Exploring and Explaining)
		SB1h: Enzyme activity	Suggested practical: Investigate the effect of temperatures and concentration on enzyme activity. (See Exploring and Explaining)
15/10/2018		SB1i: Transporting substances	Core practical: Investigate osmosis in potatoes. (See Exploring.)
		SB1i: Transporting substances	Suggested practical: Investigate the effect of different concentrations of digestive enzymes, using and evaluating models of the alimentary canal. (See Explaining.)
		Revision	
		Test	
		Review lesson	Complete exam wrapper
05/11/2018	B2 Cells and control	SB2a: Mitosis	
		SB2a: Mitosis	Investigation using a light microscope to look at mitosis in root tip cells. (See Exploring.)
		SB2b: Growth in animals	
		SB2c: Growth in plants	Investigation to measure the increase in the mass of seedlings over a two-week period. (See Exploring.)
		SB2d: Stem cells	
19/11/2018		SB2e: The brain	
		SB2e: The brain	
		SB2f: Brain and spinal cord problems	3 LESSONS RSE DROP DOWN W/C 26/11/18
		SB2g: The nervous system	Suggested practical: Investigate human responses to external stimuli. (See Exploring.)
		SB2g: The nervous system	
03/12/2018		SB2i: Neurotransmission speeds	Suggested practical: Investigate reaction times. (See Starter.)
		SB2i: Neurotransmission speeds	Suggested practical: Investigate the speed of transmission of electrical impulses in the nervous system. (See Exploring.)
		SB2h: The eye	
		SB2h: The eye	Suggested practical: Investigate human responses to external stimuli.
17/12/2018		Revision	
		Test	
		Review lesson	
		SB3a: Sexual and asexual reproduction	
		SB3b: Meiosis	
		SB3b: Meiosis	
14/01/2019		SB3c: DNA	Investigate how to extract DNA from fruit. (See Exploring.)
	B3 Genetics	SB3c: DNA	
		SB3d: Protein synthesis	
		SB3d: Protein synthesis	
		SB3e: Genetic variants and phenotypes	
28/01/2019		SB3f: Mendel	
		SB3g: Alleles	
		SB3h: Inheritance	Suggested practical: Investigate inheritance using suitable organisms or models. (See Exploring.)
		SB3i: Multiple and missing alleles	Suggested practical: Investigate inheritance using suitable organisms or models.
		SB3i: Multiple and missing alleles	
11/02/2019		SB3j: Gene mutations	Suggested practical: Investigate the variations within a species to illustrate continuous variation and discontinuous variation. (See Exploring.)
		SB3k: Variation	Practical where students consider genetic and environmental variation within one set of characteristics, the shape and form of leaves. (See Exploring.)
		SB3k: Variation	
		Revision	
04/03/2019		Test	
		Review lesson	
		CB4a: Human evolution	
		SB4b: Darwin's theory	Natural selection game using coloured pasta 'insects'. (See Exploring.)
		SB4b: Darwin's theory	
		SB4c: Development of Darwin's theory	
18/03/2019	B4 Natural selection and genetic modification	SB4d: Classification	
		SB4d: Classification	
		SB4e: Breeds and varieties	Measure the amounts of acid in different varieties of the same fruit. (See Exploring.)
		SB4f: Tissue culture	
01/04/2019		SB4g: Genes in agriculture and medicine	
		SB4h: GM and agriculture	
		SB4i: Fertilisers and biological control	
		Revision lesson	
		Test	
		Review lesson	
29/04/2019		Revision	
		Revision	
		Revision	
		Revision	
		Revision	
13/05/2019		Revision	
		Revision	
		Revision	
		Revision	
		Revision	
03/06/2019		Revision	
		Revision	
		Revision	
		Revision	
17/06/2019		Revision	
		END OF YEAR ASSESSMENT	
		Review lesson	
		Review lesson	
		Review lesson	

01/07/2019		Review lesson	
		Review lesson	
		Review lesson	
		Review lesson	
		Review lesson	
15/07/2019		Review lesson	