



King Alfred School
Curriculum Map 2017-2018
Department: Science

Year 7	Biology Big Ideas B1.1 Cells B1.2 Structure and function of body systems B1.3 Reproduction		Chemistry Big Ideas C1.1 Particles and their behaviour C1.2 Elements, atoms and compounds C1.3 Chemical reactions C1.4 Acids and alkalis		Physics Big Ideas P1.1 Forces P1.2 Sound P1.3 Light P1.4 Space	
Year 8	Biology Big Ideas B2.1 Health and lifestyle B2.2 Ecosystem processes B2.3 Adaptation and inheritance		Chemistry Big Ideas C2.1 The periodic table C2.2 Separation techniques C2.3 Metals and acids C2.4 The Earth		Physics Big Ideas P2.1 Electricity and magnetism P2.2 Energy P2.3 Motion and pressure	
Year 9	Numeracy and key topics	B1. Cells C1. Atomic Structure P1. Energy	B2 Cell division B3 Organisation and digestion C2 Periodic table	B3 Organisation and digestion B4 Organising plants and	B4 Organising plants and animals B5	B5 Communicable diseases B6 Preventing

Belong. Believe. Be Proud.

			C3 Structure and bonding P2 Energy transfer P3 Energy resources	animals C3 Structure and bonding P4 Electrical circuits P5 Electricity in the home	Communicable diseases C4 Chemical calculations P5 Electricity in the home P6 Molecules and matter	and treating disease C5 Chemical changes P7 Radioactivity
Year 10	B7 non communicable diseases B8 - Photosynthesis C6 Electrolysis C7 Energy changes P4 Electrical circuits P5 Electricity in the home	B9 Respiration B10 Nervous system - C8 Rates and equilibrium P6 Molecules and matter P7 Radioactivity	B11 Hormonal coordination C9 Crude oil C10 Organic reactions P7 Radioactivity	B12 homeostasis in action C11 - Polymers P8 Forces in balance	B13 Reproduction C12 chemical analysis P9 Motion P10 Forces and motion	B14 Variation P11 Force and pressure
Year 11	B12 Reproduction	B14 Genetics and evolution	P12 Electromagnetic	B10 Nervous system	revision	

Belong. Believe. Be Proud.

	B13 Variation and evolution C10 Chemical analysis C12 Earths resources P10 Forces and motion P11 Waves	B15 Adaptation REQUIRED PRACTICALS RF VALUES / CHEMICAL TESTS / PURIFY WATER P12 Electromagnetic waves P13 electromagnetism	waves P13 electromagnetism B15 Adaptations B16 Ecosystems	B11 Hormonal coordination B17 Biodiversity		
Year 12 Biology	TR1	Biochem Cell membrane	Mitosis Gas exchange	Mass transport	DNA, genes Replication	Stats revision
	LH1	Biochem DNA Cell structure	Immunity Digestion	Species diversity Biodiversity	Investigating diversity	Cause & correlation revision
Year 12 Chemistry	RB1	Module 2 Foundations in chemistry 2.1 Atoms and reactions		Module 4 Core organic chemistry and Module 3- periodicity		
	MC1	Module 2 Foundations in chemistry 2.2 Electrons, bonding and structure		Module 3 Periodic table and energy (Not periodicity)		

Belong. Believe. Be Proud.

Year 12 Physics	SW3	Chapter 2 → Chapters 3,4,5,6,7 → Chapter 8,9,10				
	DWK	Chapter 11 → Chapter 12 → Chapter 13				
Year 13 Biology	TR1 (Thursday A2 after school)	Response to stimuli Populations in ecosystems	Nervous control + stats (1)	Homeostasis + stats (1)	Genetics Control of gene expression Recombinant DNA (1)	Population & evolution Populations in ecosystems
	SMA (13A)	Photosynthesis	Respiration	Energy and ecosystems	Stats (2)	maths skills revision AS
	SMA (13D)	Photosynthesis	Respiration + stats (1)	Energy and ecosystems + stats (1)	Control of gene expression Recombinant DNA (1) Stats (2)	maths skills revision AS
Year 13 Chemistry	RB1	Module 6 Organic chemistry and analysis			Revision	Revision
	SW3	Module 5 Physical chemistry and transition elements			Revision	Revision
Year 13 Physics	SW3	Chapter 18 → Chapters 14,15 → Chapter 16,17 → Chapters 21,22,23 → Chapters 25,26				
	DWK	Chapter 19 → Chapter 20 → Chapter 24 → Chapter 27				

Belong. Believe. Be Proud.