

Biology			
Topic		Lesson Title	Tier
Cell Biology	1	Osmosis	
	2	RP Osmosis 1	
	3	RP Osmosis 2	
	4	Active Transport	
	5	Genes, DNA, Cell Cycle	
	6	Culturing Microbes	Triple
	7	Microbes	Triple
	8	Stem Cells	
Organisation		Educake + written Assessment	
	1	Food tests	
	2	Digestive Enzymes - model gut	
	3	Digestion and Absorption - dig system	
	4	Enzymes - investigating temp	
	5	RP Enzymes 1	
	6	RP Enzymes 2	
	7	The Lungs	
	8	Blood and Blood Vessels	
	9	Heart	
	10	Heart Disease	
		Topic assessment	
		Feedback	
Organisation	11	Lifestyle and Disease	
	12	Cancer	
	13	Plant Tissues and Organs	
	14	Transpiration and Translocation	
Bioenergetics	3	RP Rate of Photosynthesis	
	4	RP Rate and Limiting Factors	
	5	Manipulating Photosynthesis	
	6	Respiration and Exercise	
	7	Aerobic Respiration	
	8	Metabolism	
Revision Lessons			
Mocks	Mock Exam - Paper 1 + Feedback		
Homeostasis	1	Nervous System	
	2	Reflex Actions	
	3	RP Reaction Times	
	4	RP Reaction Time Practical Follow up	
	5	The Brain	Triple
	6	The Eye and Vision	Triple
	7	Correcting Vision & eye dissection	Triple
		Topic assessment	
		Feedback	
	8	Hormonal responses part 1	
	8	Hormonal responses part 2 - negative feedback	Higher
	9	Homeostasis	
	10	Temperature Regulation	Triple
	11	Blood Glucose Control	
	12	Diabetes and Treatment	
	13	Water Balance	Triple
	14	Kidney Function	Triple
	15	Kidney Failure and Treatment	Triple
	16	The Menstrual Cycle	
	17	Fertility Treatment	Higher
	18	Contraception	
	19	RP Plant Hormones	Triple
	20	RP Plant Growth	Triple
		Topic assessment	
		Feedback	

Chemistry			
Topic		Lesson Title	Tier
Bonding	1	Ionic Bonding	
	2	Properties of Ionic Compounds	
	3	Covalent Bonding	
	4	Types of Covalent Substances	
	5	Polymers	
	6	Structure and Bonding of Carbon	
	7	Metallic Bonding	
	8	Solids liquids and Gases	
	9	Nano particles	Triple
	10	Educake + written Assessment	
	11	Feedback	
Quantitative Chemistry	1	Atomic and Formula Mass	
	2	Moles and Avagadro	Higher
	3	Balancing Equations	
	4	Reacting Masses 1	
	5	Reacting Masses 2	Higher
	6	Using Moles to balance equations	
	7	Atom Economy and percentage yield	Triple
	8	Solutions	
	9	Titrations Introduction	Triple
	10	Limiting Reactants	Higher
	11	Moles and Gasses	Triple
Chemical Changes		Topic assessment	
		Feedback	
	1	Redox Reactions	HT/FT
	2	Metals and Acids	
	3	Reactivity of Metals	
	4	Metal Oxides and Acids	
	5	Metal Carbonates and Acids	
	6	Making Salts	
	7	Acid Alkali Reactions	
	8	Strong and Weak Acids	Higher
	8	Strong and Weak Acids	Higher
	9	Titration Require Prac 1	Triple
	10	Titration Require Prac 2	Triple
	11	Binary compound Electrolysis	
	12	Using Electrolysis to extract metals	
	13	Electrolysis of Solutions	
	14	Required practical electrolysis	
Mocks	Mock Exam - Paper 1 + Feedback		
Energy Changes	1		
	2	Exo and Endo thermic	
	2	Required Practical 1	
	3	Required Practical 2	
	4	Energy Level Diagrams	
	5	Bond Energies	Higher
	6	Batteries	Triple
Revision Lessons	7	Fuel Cells	Triple
	1	Atomic Model	
	2	Periodic Table	
	3	Bonding and Properties	
	4	Polymers and Carbon	
	5	Calculations RFM and Solution	
	6	Calculations Moles and Reacting masses	
	7	Reactivity of Metals	
	8	Making Salts	
	9	Strength and Conc	Higher
	10	Electrolysis	
Rates	11	Energy Changes	
	1	Measuring Rates	
	2	Required Practical 1	
	3	Required Practical 2	
	4	The effect of Temperature	
	5	The Effect of Surface Area	
	6	Pressure in Gaseous Reactions	
	7	The effect of Catalysts	
	8	Reversible Reactions	
	9	Le Chateliers Principle	Higher
	10	Industrial Conditions	Higher
		Topic assessment	
		Feedback	

Physics			
Topic		Lesson Title	Tier
Energy	1	Energy Transfers	
	2	Kinetic Energy	
	3	Gravitational Potential Energy	
	4	Elastic Potential Energy	
	5	Work Done and Power	
	6	RP Specific Heat Capacity	
	7	RP Follow Up	
	8	Reducing Unwanted Energy Transfers	
	9	RP Thermal Insulators	Triple
	10	RP Insulation Thickness	Triple
	11	Using Energy Resources	
	12	Which Resource is Best	
Electricity		Educake + written Assessment	
		Feedback	
	1	Current and Charge	
	2	Ohm's Law	
	3	RP Resistance in a Wire	
	4	Resistance in Series Circuits	
	5	Resistance in Parallel Circuits	
	6	RP IV Fixed Resistor	
	7	RP IV Filament Bulb	
	8	RP IV Diode	
	9	Light Dependent Resistors	
	10	Thermistor	
	11	Electricity in the Home	
	12	Appliance and Power	
	13	Appliances and Energy	
	14	National Grid	
	15	Static Electricity	Triple
	16	Electrical Fields	Triple
Particle Model		Topic assessment	
		Feedback	
	1	Particle Model	
	2	Density Solids RP	
	3	Density Liquids RP	
	4	Internal Energy	
	5	Specific Latent Heat	
	6	Gas Pressure	
	7	Gas Pressure 2	Triple
Mocks	Mock Exam - Paper 1 + Feedback		
Atomic Model	1	Atoms and Isotopes	
	2	Development of Atomic Model	
	3	Radiation	
	4	Half Life	
	5	Uses of Radiation	
	6	Irradiation	
	7	Fission Fusion	Triple
Revision Lessons	1	Changes of State	
	2	Current Pd and Resistance	
	3	Electrical Power and Energy Cals	
	4	Electricity use and distribution	
	5	Energy Resources	
	6	Energy Stores and Transfers	
	7	Particle Model and Density	
	8	Power and Efficiency	
	9	Radioactive Radiation	
	10	Series and Parallel Circuits and Components	
	11	Specific Heat Capacity	
	12	Infra Red RPA	
	13	Waves PRA	
	14	Hookes Law RPA	
	15	F=MA RPA	
Forces	1	Forces and Interactions	
	2	Weight Mass and Gravity	
	3	Resultant Forces	
	4	Forces and Work	
	5	Forces and Electricity Part 1	
	6	Forces and Elasticity Part 2	
	7	Moments and Levers	Triple
	8	Moments and Gears	Triple
	9	Pressure	Triple
	10	Pressure in Liquids	Triple
	11	Atmospheric Pressure	Triple
	12	Speed Distance Time	