## <u>Physics – Separate Science - Paper 1</u>

Topic	Red Amber Green
Energy and matter	
Describing changes in energy stores	
Conversation and dissipation of energy	
Calculating energy transfers by linking different energy stores	
Changes of state and the particle model	
Specific heat capacity	
Specific latent heat	
Heating and cooling graphs	
Internal energy	
GPE	
KE	
Work done	
Power	
Efficiency	
Practical – Investigating thermal insulation	
Practical – Density of regular and irregular objects	
National grid	
Calculating density	
Nuclear radiation	
Properties of three types of radiation	
Nuclear decay equations	
Contamination and Irradiation	

## Physics – Separate Science - Paper 2

Торіс	Red Amber Green
Forces	
Scalar and vectors	
Contact and non contact forces	
Gravity, mass and weight	
Resultant forces and their effects	
Resolution of forces	
Work done	
Springs calculations and explaining the graph of force and extension	
Pressure	
Pressure in fluids	
Motion along a straight line	
Distance and displacement	
Velocity and acceleration	
Distance time graphs (describing journey and calculations)	
Velocity time graphs (describing journey and calculations)	
SUVAT equation for uniform motion	
Newtons laws of motion	
Momentum, conservation of momentum and changes of momentum	
Waves	
Transverse and longitudinal waves	
General properties of waves (amplitude, wavelength and time period)	
Reflection of waves	
Practical reflection and refraction of light by different materials	
Sound waves	
Ultrasound	
Solar system and satellites	
Red shift	

All **Revision Materials** are available for students on Teams: Click <u>here</u>