

# Provider-led

## INTERVIEWS & ADMISSIONS Subject Knowledge Audit – Science with Physics

Please self-grade and identify the source/s of your knowledge for each of the topics in both tables below.

Source of Knowledge / Skills (write one or two codes):

N	None (or below GCSE)	D	Degree Level (including HND)
G	GCSE (or O Level)	P	Post-graduate
A	Advanced Level (including AVCE, HNC)	W	Work-related training

Current Level of Knowledge / Skill (write one grade only):

- 4 Little or No Secure Knowledge.
- 3 Basic Personal Knowledge up to GCSE level, however you are not fully aware of possible misconceptions and how to address them and you may inadvertently reinforce misconceptions.
- 2 Secure knowledge / skill up to GCSE that would enable you to teach this to pupils. You would be aware of the common misconceptions in this skill area and you would be able to address these in a lesson.
- 1 Secure knowledge / skill up to A Level standard.

<b>Name:</b>	<b>Date:</b>
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Area	Skill / Knowledge	Source N/G/A/D/P/W	Level 1/2/3/4
Energy Transfer	Infrared Radiation (Core)		
	Kinetic Theory (Core)		
	Energy Transfer by Heating (Core)		
	Heating and Insulating Buildings (Core)		
	Energy Transfers and Efficiency (Core)		
Electricity	Transferring Electrical Energy (Core)		
	Generating Electricity (Core)		
	The National Grid (Core)		
	Static Electricity (Additional)		
	Electrical Circuits (Additional)		
	Household Electricity (Additional)		
	Current, Charge and Power (Additional)		
	Motor Effect (Triple)		
	Transformers (Triple)		
Waves	General properties of waves (Core)		
	Reflection (Core)		
	Sound (Core)		
	Red Shift (Core)		

Forces	Resultant Forces (Additional)		
	Forces and Motion (Additional)		
	Forces and Braking (Additional)		
	Forces and Terminal Velocity (Additional)		
	Forces and Elasticity (Additional)		
	Forces and Energy (Additional)		
	Momentum (Additional) (Triple)		
	Centre of Mass (Triple)		
	Hydraulics (Triple)		
	Circular Motion (Triple)		
Radiation	Atomic Structure (Additional)		
	Atoms and Radiation (Additional)		
	Nuclear Fusion (Additional)		
	Nuclear Fission (Additional)		
Medical Applications of Physics	X-Rays (Triple)		
	Ultrasound (Triple)		
	Lenses (Triple)		
	The Eye (Triple)		
	Other Applications, e.g. Optical Fibres, Lasers (Triple)		

Additional relevant information (optional):

## SCIENCE

Area	Skill / Knowledge	Source N/G/A/D/P/W	Level 1/2/3/4
Cell Activity	Plant and Animal cells		
	Transport across boundaries e.g. osmosis		
	Cell Division		
Humans As Organisms	Nutrition		
	Mammalian Circulation		
	Breathing		
	Respiration		
	Nervous System		
	Hormones		
	Homeostasis		
	Disease Drugs		
Green Plants As Organisms	Plant nutrition		
	Plant hormones		
	Transport in and water relations		
Variation, Inheritance And Evolution	Variation		
	Genetics and DNA		
	Genetic Engineering		
	Controlling Inheritance Evolution		
Living Things In Their Environment	Adaptation and Competition		
	Human Impact on the Environment		
	Energy and Nutrient Transfer		
	Nutrient Cycles		
Classifying Materials	Atomic structure		
	Bonding		
Changing Materials	Useful products from Oil		
	Useful products from Metal Ores		
	Useful products from Rocks		
	Useful products from Air		
	Representing Reactions		
	Quantitative Chemistry		
	Changes to the Earth and Atmosphere The Rock Record		
Patterns Of Behaviour	The Periodic Table		
	Chemical Reactions		
	Rates of Reactions		
	Reactions involving enzymes		
	Reversible Reactions		
	Energy Transfer in Reactions		
Electricity	Energy in circuits		
	Mains Electricity		
	The Cost of using Electrical Appliances		
	Electrical change		

Forces And Motion	Representing and measuring motion		
	Forces and Acceleration		
	Frictional Forces and non-uniform motion		
Waves	Characteristics of Waves		
	The Electromagnetic Spectrum		
	Sound and Ultrasound		
	Seismic Waves		
	Tectonics		
The Earth And Beyond	The Solar System		
	The Universe		
Energy Resources And Energy Transfer	Thermal Energy Transfer		
	Efficiency		
	Energy Resources		
	Work Power and Energy		
	Electromagnetic Forces		
	Electromagnetic Induction		
Radioactivity	Types, Properties and uses of Radioactivity		
	Atomic Structure and Nuclear Fissions		

Additional relevant information (optional):