

## Year 8 Revision List

Physics For You is an excellent source of information. These links will help you check your understanding of the following topics:

Electricity And Magnetism		Understanding	
Topics	Pages	Start	End
Know that static electricity is caused when friction is used to transfer electrons between insulators	245, 246		
Know like charges repel and opposite charges attract	245		
Know electric charge is positive or negative	246		
Know electrons have a negative charge	246		
Know the circuit symbols for an ammeter, voltmeter, lamp, switch and battery of cells.	254, 256, 258		
Know that an electric current is a flow of electrons	254, 255		
Know that components (eg lamps) are connected in series when all the electrons go through both components.	256		
Know how to measure current	256		
Know that the same current flows through each part of a series circuit	256		
Know how to measure potential difference (voltage)	258		
Know that, for a parallel circuit, the current from the battery is the sum of the currents in the separate branches	257		
Know that, for a parallel circuit, the potential difference is the same across each branch	263		
Investigate a magnetic field using plotting compasses or iron filings	288		
Draw the magnetic field around a bar magnet	288		
Know how to make an electromagnet, and how to make it stronger.	292, 293		
Understand some uses and advantages of electromagnets (including in scrapyards and electric motors)	294, 298, 299		

Energy			
Know these types of energy: magnetic, kinetic, heat (thermal), light, gravitational potential, chemical, sound, elastic potential, electric, nuclear.	10, 11		
Be able to explain energy transfers	10, 11		
Know how power stations produce electricity	108		
Compare renewable and non-renewable energy resources	13, 14, 15		

Motion and Pressure			
Know and use $\text{pressure} = \text{force} / \text{area}$	77		
Know that pressure in liquids increases with depth	78		
Know that a moment is a turning force	94		
Know and use $\text{moment} = \text{force} \times \text{perpendicular distance to pivot}$	94		
Know the principle of moments: In equilibrium, the total anti-clockwise moment = the total clockwise moment	95		
Solve problems using the principle of moments	95		

Working Scientifically			
Know about types of variable (dependent, independent and control variables)	7, 362		