Year 10 Revision with GCSEPod links

(bold = triple physics only) (red - Higher Tier HT only) (blue - required practicals RP)

AQA Triple Physics Specification:	https://filestore.aqa.org.uk/resources/physics/specifications/AQA-8463-SP-2016.PDF
AQA Trilogy Science Specification:	https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF
Past papers for Triple found at:	https://revisionscience.com/gcse-revision/physics/physics-gcse-past-papers/aqa-gcse-physics-past-papers
Past papers for Trilogy found at: (use trilogy, not synergy papers)	https://revisionscience.com/gcse-revision/science/science-gcse-past-papers/aqa-gcse-science-past-papers
BBC Bitesize Revision:	https://www.bbc.co.uk/bitesize/examspecs/zsc9rdm
Cognito GCSE Physics:	https://www.youtube.com/watch?v=JGwcDCeYRYo&list=PLidqqIGKox7UVC-8WC9djoeBzwxPeXph7
Free Science Lessons:	https://www.youtube.com/c/Freesciencelessons/playlists

Topic	Equations	GCSEPod Link
1 Energy		
1.1 Energy changes in a system		https://members.gcsepod.com/shared/podcasts/chapter/83167
1.1.1 Energy stores and systems		https://members.gcsepod.com/shared/podcasts/chapter/83066
1.1.2 Changes in energy	$E_k = 0.5mv^2$ $E_e = 0.5ke^2$ $E_p = mgh$	https://members.gcsepod.com/shared/podcasts/chapter/64231
1.1.3 Energy Changes in systems	$\Delta E = mc\Delta\theta$	
RP 1 Specific heat capacity		
1.1.4 Power	$P = E/t$ $P = W/t$	https://members.gcsepod.com/shared/podcasts/chapter/83105
1.2 Conservation and dissipation of energy		
1.2.1 Energy transfers in a system		https://members.gcsepod.com/shared/podcasts/chapter/82965
RP 2 Thermal insulation (physics only)		https://members.gcsepod.com/shared/podcasts/chapter/64238
1.2.2 Efficiency	efficiency = useful output energy/ total input energy efficiency = useful output power/ total input power	https://members.gcsepod.com/shared/podcasts/chapter/83006
1.3 National and global energy resources		
2 Electricity		
2.1 Current, potential difference and resistance		
2.1.1 Standard circuit diagram symbols		https://members.gcsepod.com/shared/podcasts/chapter/64243
2.1.2 Electrical charge and current	$Q = It$	
2.1.3 Current, resistance and potential difference	$V = IR$	https://members.gcsepod.com/shared/podcasts/chapter/64241
RP 3 Factors affecting resistance		https://members.gcsepod.com/shared/podcasts/chapter/64240
2.1.4 Resistors		https://members.gcsepod.com/shared/podcasts/chapter/64250
RP 4 I-V characteristics		https://members.gcsepod.com/shared/podcasts/chapter/64242
2.2 Series and parallel circuits	$R_{total} = R_1 + R_2$	https://members.gcsepod.com/shared/podcasts/chapter/64251
2.3 Domestic uses and safety		
2.3.1 Direct and alternating potential difference		https://members.gcsepod.com/shared/podcasts/chapter/64252
2.3.2 Mains electricity		https://members.gcsepod.com/shared/podcasts/chapter/64256
2.4 Energy transfers		
2.4.1 Power	$P = VI$ $P = I^2R$	https://members.gcsepod.com/shared/podcasts/chapter/64260
2.4.2 Energy transfers in everyday appliances	$E = Pt$ $E = QV$	https://members.gcsepod.com/shared/podcasts/chapter/64260
2.4.3 The National Grid		https://members.gcsepod.com/shared/podcasts/chapter/64258
2.5 Static electricity (physics only)		
2.5.1 Static charge		https://members.gcsepod.com/shared/podcasts/chapter/64263

2.5.2 Electric fields		
3 Particle model of matter		
3.1 Changes of state and the particle model		
3.1.1 Density of materials	$\rho = m/V$	https://members.gcsepod.com/shared/podcasts/chapter/64269
RP 5 Density		
3.1.2 Changes of state		https://members.gcsepod.com/shared/podcasts/chapter/64267
3.2 Internal energy and energy transfers		
3.2.1 Internal energy		https://members.gcsepod.com/shared/podcasts/chapter/64270
3.2.2 Temperature changes in a system and specific heat capacity	$\Delta E = mc\Delta\theta$ (also in energy)	https://members.gcsepod.com/shared/podcasts/chapter/64271
3.2.3 Changes of state and specific latent heat	$E = mL$	https://members.gcsepod.com/shared/podcasts/chapter/64272
3.3 Particle model and pressure		
3.3.1 Particle motion in gases		https://members.gcsepod.com/shared/podcasts/chapter/64273
3.3.2 Pressure in gases (physics only)	$PV = constant$	https://members.gcsepod.com/shared/podcasts/chapter/64274
3.3.3 Increasing the pressure of a gas (physics only) (HT only)		
4 Atomic Structure		
4.1 Atoms and isotopes		
4.1.1 The structure of an atom		https://members.gcsepod.com/shared/podcasts/chapter/64278
4.1.2 Mass number, atomic number and isotopes		https://members.gcsepod.com/shared/podcasts/chapter/64276
4.1.3 The development of the model of the atom (common content with chemistry)		https://members.gcsepod.com/shared/podcasts/chapter/64275
4.2 Atoms and nuclear radiation		https://members.gcsepod.com/shared/podcasts/chapter/64279
4.2.1 Radioactive decay and nuclear radiation		https://members.gcsepod.com/shared/podcasts/chapter/64280
4.2.2 Nuclear equations		https://members.gcsepod.com/shared/podcasts/chapter/64286
4.2.3 Half lives and the random nature of radioactive decay		https://members.gcsepod.com/shared/podcasts/chapter/64283
4.2.4 Radioactive contamination		https://members.gcsepod.com/shared/podcasts/chapter/64281
4.3 Hazards and uses of radioactive emissions and of background radiation (physics only)		
4.3.1 Background radiation		https://members.gcsepod.com/shared/podcasts/chapter/64288
4.3.2 Different half-lives of radioactive isotopes		
4.3.3 Uses of nuclear radiation		https://members.gcsepod.com/shared/podcasts/chapter/64289
4.4 Nuclear fission and fusion (physics only)		
4.4.1 Nuclear fission		https://members.gcsepod.com/shared/podcasts/chapter/64290
4.4.2 Nuclear fusion		https://members.gcsepod.com/shared/podcasts/chapter/64291