

Combined Science: Foundation Revision list

Physics Paper 1

Topic	Tick
Chapter 1:	
State the energy stores https://www.youtube.com/watch?v=IBKjThIIOUA	
Describe how energy changes in different situations https://www.youtube.com/watch?v=gj1tu8bTKjI	
Use the kinetic energy equation https://www.youtube.com/watch?v=WfFCHt21kVA	
Use the elastic potential energy equation https://www.youtube.com/watch?v=8Z8jUW03z3s	
Use the gravitational potential energy equation https://www.youtube.com/watch?v=63OTIdNb-TE	
Use the specific heat capacity equation https://www.youtube.com/watch?v=4rT7-5yE4pQ	
RPA specific heat capacity https://www.youtube.com/watch?v=loeRLKNeUsc	
Use the power equations https://www.youtube.com/watch?v=kCJUzdCBOK0	
Use the word done equation	
Describe the use of non renewable and renewable energy sources https://www.youtube.com/watch?v=pqzvUur7QRw	
Chapter 2:	
Draw circuit symbols https://www.youtube.com/watch?v=sFUmuuJjAcw	
Define and calculate charge https://www.youtube.com/watch?v=TIHW5hEoaAw	
Define current, resistance and potential difference https://www.youtube.com/watch?v=hRojfU77c38	
Use the ohms law calculation	
Describe and explain the IV graphs of resistors, filament lamp, diode, thermistors and LDRs https://www.youtube.com/watch?v=hRojfU77c38	
Describe the uses of thermistors and LDRs https://www.youtube.com/watch?v=bjt4CrRL8yM https://www.youtube.com/watch?v=bb7sRiLKCVg	
RPA IV graphs https://www.youtube.com/watch?v=ksPzfUjMbBk	

Chapter 3:	
Use the density equation https://www.youtube.com/watch?v=pgGzVdau1Bw	
Draw particle diagrams of solid, liquid and gases https://www.youtube.com/watch?v=OTksau0_VoI	
Explain density in terms of particles	
Describe changes of state https://www.youtube.com/watch?v=xYU7RSoOZ0U	
Chapter 4:	
Describe the properties of alpha, beta and gamma https://www.youtube.com/watch?v=nWOS1C6wVrg	
Write radioactive decay questions https://www.youtube.com/watch?v=CaYoDxWxww8	
Define the term "half-life" https://www.youtube.com/watch?v=zXw2cOSBB8E	
Determine the half-life on a graph	
Compare contamination and irradiation https://www.youtube.com/watch?v=teGuOVAPIOo	

Physics Paper 2

Topic	Tick
Chapter 5	
Define scalar and vectors with examples https://www.youtube.com/watch?v=P1ISWWUkMdQ	
Define contact and non-contact forces with examples https://www.youtube.com/watch?v=WCPTKRaScgE	
Define weight and use the equation https://www.youtube.com/watch?v=W2aBVbcHr_k	
Define resultant force and calculate it in different situations https://www.youtube.com/watch?v=YGGxf6cp3Lo	
Define distance and displacement https://www.youtube.com/watch?v=QaU9jMHh7gE	
Calculate speed https://www.youtube.com/watch?v=M_OFRIX8wIM	
Explain the difference between velocity and speed	
Interpret distance-time graphs https://www.youtube.com/watch?v=RM02SnuJOMY	
Interpret velocity-time graphs https://www.youtube.com/watch?v=b0VKIpetP9A	
Calculate acceleration https://www.youtube.com/watch?v=Kzx8GBTI5VM	
Describe Newton's Laws https://www.youtube.com/watch?v=i5PtaCJJFjw https://www.youtube.com/watch?v=DpQ_ikFKru0	
Describe stopping distance and what affects it (include thinking and braking distance) https://www.youtube.com/watch?v=drMKdcMq3o0	
Chapter 6:	
State the electromagnetic spectrum waves in order https://www.youtube.com/watch?v=u5vkYjV1V1A	
State properties and uses of electromagnetic waves	
Describe the problems of using UV, x rays and gamma rays https://www.youtube.com/watch?v=dBFGjdgbpno	
RPA infrared radiation https://www.youtube.com/watch?v=LFwio38EK9s	
Chapter 7:	
State the poles of a magnet https://www.youtube.com/watch?v=3elpPfyHVOE	

Describe the rules of attraction in terms of a permanent magnet	
Describe the difference between permanent and temporary magnets https://www.youtube.com/watch?v=sRyy7-jEu3Q	
Draw a magnetic field	
Describe how to plot a magnetic field using a compass https://www.youtube.com/watch?v=NWUgK8W-4JM	
Describe how the magnetic effect of a current can be demonstrated https://www.youtube.com/watch?v=dMbWkodL12I	
Draw the magnetic field pattern for a straight wire carrying a current and for a solenoid https://www.youtube.com/watch?v=tiBmSeKdFxg	
Explain how a solenoid arrangement can increase the magnetic effect of the current.	