

**Core Science  
Revision Timetable  
February – June 2017**

## Y11 Science A – Core Science Revision Countdown!

This should be used a guide to aid your AQA core science revision

w/c	Monday	Tuesday	Wednesday	Thursday	Friday	Weekend
20/2/17	Explain how hydrocarbons are linked to crude oil	What are the effects of high cholesterol	List and describe 7 forms of energy	Describe the atomic structure of atoms with mass & atomic number	Describe the law of reflection. Be able to draw a reflected image	Draw & Explain the differences in microbes & role of white blood cells
	How do optical fibres work	Describe the 3 main issues of burning fuels	Describe decay and the carbon cycle	Practice the efficiency calculation. What is wasted & useful energy?	Describe the difference between atoms, elements & compounds	Describe and explain the process of fractional distillation
27/2/17	Explain the difference between sexual & asexual reproduction	Describe the energy transfers in electrical appliances	Explain how ethanol is made by fermentation & hydration	Describe and explain the function of the 7 nutrient groups	What are differences between step up and step down transformers	Explain the difference between covalent and ionic bonds
	Describe how metals are bonded	Link U-values and how we insulate buildings	How are electrons arranged in atoms?	Describe the + & - of generating energy from water and wind	Explain the conservation of energy and energy transfers	Describe how you can measure environmental change
6/3/17	Describe the + & - of generating energy from the sun & the Earth	Describe how vaccinations and antibiotics work	Describe the advantages & disadvantages of renewable energy	Explain & practice the specific heat capacity calculation	Describe and explain the process of cracking	Download and attempt 3 mock exams – use the mark scheme to self assess
	Compare and contrast alkanes and alkenes	Explain the meaning of hydrophilic and hydrophobic	Explain the advantages & disadvantages of biofuels	Describe the electromagnetic spectrum (EM)	Describe competition in plants and animals	Explain the uses and hazards of the EM waves
13/3/17	Describe the big bang theory	Explain different plant and animal adaptations & extremophiles	Explain the properties of sound waves and echos	What does it mean to 'harden' vegetable oils	Describe the Doppler effect	Describe & explain adult cell cloning & contrast to embryo cloning
	Describe the thermal decomposition of carbonates	What is the difference between real and virtual images	Describe how polymers are made from alkenes (polymerisation)	Describe how radio and microwaves are used in communication	Describe the difference between cuttings & tissue culture cloning	Download and attempt 3 mock exams – use the mark scheme to self assess

20/3/17	Describe how sound waves travel	Practice writing word equations + Symbol equations (HT)	Explain what cosmic microwave background radiation is	Explain why arctic animals are large	Describe the structure of the Earth & link to Alfred Wegener	Describe and explain the limestone cycle
	What factors affect the rate of energy transfer	Link pyramids of biomass to energy loss in energy transfers	Explain & practice the 'power' calculation	How is energy obtained from nuclear fission	Describe the role of DNA in inheritance	Explain how power stations generate electricity
27/3/17	Explain how we can extract oils from plants	Describe red shift and how the universe is expanding	Describe the formation & uses of concrete and cement	Explain what carbon capture and storage (CCS) is	Describe and explain emulsions	What is a drug? Explain the process of drug testing
	Be able to annotate the parts of a wave	Explain the nature Vs nurture debate	What is the greenhouse effect?	Compare the properties & uses of Ti and Al.	Explain why biofuels are carbon neutral	Describe evaporation & condensation in detail
3/4/17	Explain how copper can be extracted by phytomining & bioleaching	Describe how we classify organisms	Compare convection, conduction & radiation	Explain how the vacuum flask reduces energy transfer	Define and list of examples of homeostasis and plant hormones	Research the evidence for how Darwin's ideas were accepted
10/4/17	Compare the Earth's early atmosphere to the modern day	How are volcanoes and earthquakes formed	Describe the process of reflex actions	Describe how the 'payback time' calculation is used.	What is a kilowatt-hour?	Describe, explain & give examples of genetic engineering
17/4/17	What are alloys and give examples of their uses	Describe and explain the reduction by carbon	What are food additives?	Compare & contrast Lamarck & Darwin theories	Describe refraction. Be able to draw a refracted image	Research the economic, ethical & social issues surrounding genetic engineering
24/4/17	Describe the units for energy and power	Explain the role of hormones in the menstrual cycle	Explain what surfaces are the best emitters and absorbers	Practice the calculation for the working out the cost of electricity	Link the reactivity of metals to their extractions	Compare and contrast transverse and longitudinal waves
1/5/17	Explain how natural selection works	Explain and describe diffraction.	Describe the Miller-Urey experiment	Explain the issues of quarrying limestone	Practice the calculation for wave speed	What are and give examples of smart polymers

<b>8/5/17</b>	Explain the process of electrolysis	Describe the properties of steel	Describe the national grid and transformers	What is the test for unsaturated bonds?	How do we extract copper by smelting	Mindmap all of B1. Mindmap all of C1.
<b>15/5/17</b>	Complete B1 6 mark questions	<b>B1 Exam 1400 Sports Hall</b>	Complete C1 6 mark questions	<b>C1 Exam 0900 Sports Hall</b>	Compare the 3 states of matter	Mindmap all of P1.
<b>22/5/17</b>	Go back through and find examples of all P1 equations	Complete P1 6 mark questions	<b>P1 Exam 1400 Sports Hall</b>	Core Science has been completed well done and thank you for all your hard work.		

**Physics** - <http://www.aqa.org.uk/subjects/science/gcse/physics-4403/past-papers-and-mark-schemes>

**Biology** – <http://www.aqa.org.uk/subjects/science/gcse/biology-4401/past-papers-and-mark-schemes>

**Chemistry** - <http://www.aqa.org.uk/subjects/science/gcse/chemistry-4402/past-papers-and-mark-schemes>

**BBC Bitesize support** - <http://www.bbc.co.uk/education/subjects/zrkw2hv>