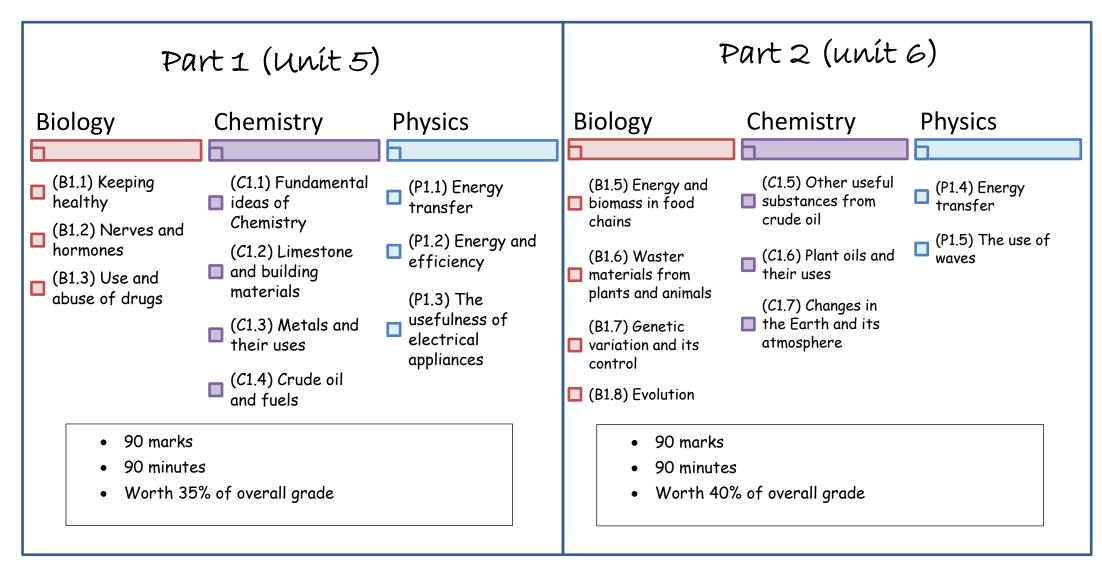
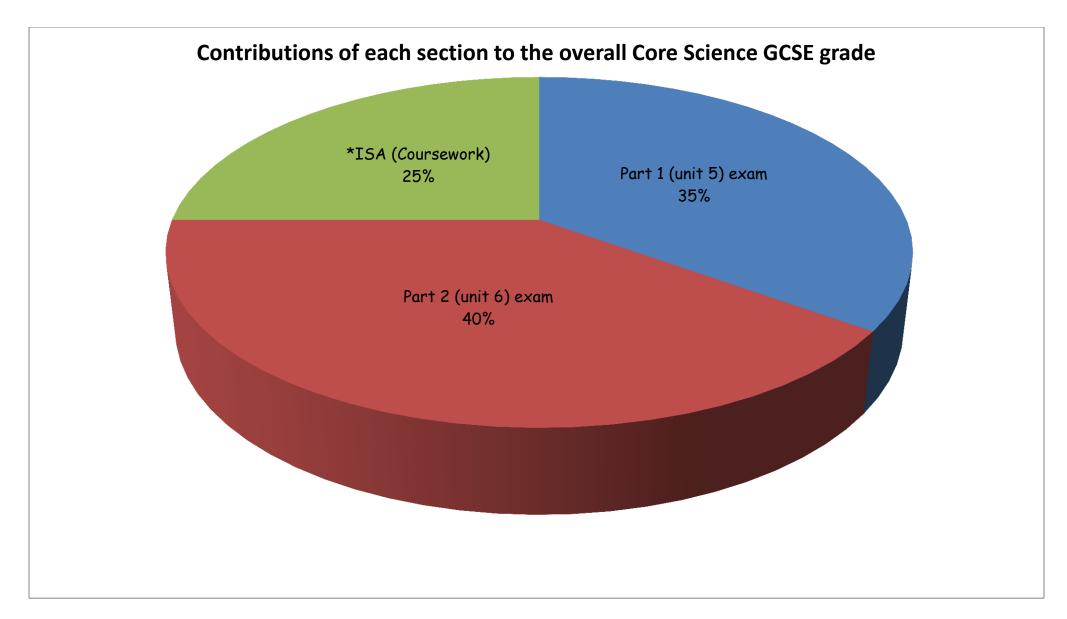
Core science (Science A)

This is the first of the GCSE's that your son/daughter can get in science. <u>All students take this course</u>. It is made up of 6 main modules (two chemistry, two biology and two physics) as outlined below. The students will take two exams at the end of year 10 (part 1 and part 2). The marks from both papers will be added together to give an overall "Core Science grade".





^{*} For information about the Independent Skills Assessment (ISA) please refer to the *ISA* explained document in the GCSE folder

Lots of Bitesize audio clips for your MP3 players can be downloaded here: http://www.bbc.co.uk/schools/gcsebitesize/audio/science/

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk On the left hand menu click on "science". Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.1	Keeping healthy	Pages 12-15	bitesize keeping healthy diet and exercise activity diet and exercise quiz bitesize defence against infection defence against infection activity defence against infection quiz skoool balanced diet skoool defence mechanisms skoool vaccinations skoool malnutrition	balanced diets defence against disease vaccination semmelweis antibiotic resistance culturing microorganisms bitesize vids energy in food microorganisms microscopy	No e-chalk animations for this section	 ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Biology 1" 4. Click on "Keeping Healthy" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 24 - 45

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 4. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 5. On the left hand menu click on "science". 6. Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.2	Nerves and hormones	Pages 16 -20	bitesize nervous system nervous system activity nervous system quiz bitesize control in the human body control in the body activity control in the body quiz bitesize control in plants control in plants quiz skoool nerves	the nervous system and reflexes homeostasis menstrual cycle controlling fertility auxin in plants bitesize vids germination	Go to "Biology" The female reproductive system The menstrual cycle The menstrual cycle: word gap exercise The endocrine system: a visual database The endocrine system: cloud click game The endocrine system labelling exercise The ultimate reaction test Homeostasis bounce quiz	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Biology 1" Click on "Coordination and control" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 46-61

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 7. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 8. On the left hand menu click on "science". 9. Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.3	The use and abuse of drugs	Pages 21-23	bitesize drugs drugs quiz talk to frank	developing new drugs recreational drugs	No e-chalk animations for this section	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Biology 1" Click on "medicine and drugs" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 62-74

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk On the left hand menu click on "science". Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
C1.1	The fundament al ideas in Chemistry	Pages 34-38	bitesize atoms atoms activity atoms quiz bitesize periodic table periodic table activity periodic table quiz bitesize chemical reactions chemical reactions quiz skoool structure and bonding skoool elements of the periodic table skoool atoms and the periodic table skoool group 1 metals	labelling and drawing atoms ionic bonding covalent bonding balancing equations periodic table key features	Go to "chemistry" Venn diagram states of matter States of matter Build your own atom Atomic structure: bounce quiz Electron configuration pairs Covalenet and ionic bonding Elements, compounds and mixtures Identifying elements, compounds and mixtures Electronic structure: visual database The periodic table game Periodic table Metals and non-metals balloon pop game Electron configuration pairs	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Chemistry 1" Click on "Fundamental ideas" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 134-145

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 4. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 5. On the left hand menu click on "science". 6. Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
<i>C</i> 1.2	Limestone and building materials	Page 39	skoool metals ores and rocks bitesize calcium carbonate limestone activity limestone quiz	limestone	Go to "chemistry" Moonlander: reactivity series Interactive reactivity series	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Chemistry 1" Click on "Rocks and building materials" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 146-157

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	7. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 8. On the left hand menu click on "science". 9. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
<i>C</i> 1.3	Metals and their uses	Pages 40-42	bitesize metals metals activity bitesize quiz	extraction of metal uses of metals and bioleaching iron steel and alloys transition metals	Go to "chemistry" The blast furnace	ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Chemistry 1" 4. Click on "Metals and their uses" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 158-171

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	10. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 11. On the left hand menu click on "science". 12. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
C1.4	Crude oil and fuels	Pages 43-44	bitesize separating crude oil separating crude oil quiz bitesize hydrocarbons as fuels crude oil activity crude oil quiz skoool crude oil (you do not need to know about cracking, plastics or alkenes at this point)	crude oil alkanes burning hydrocarbo ns biofuels	Go to "chemistry" Alkanes and Alkenes. (only look at the molecules ending in 'ane' though. Fractional distillation column Crude oil and fractional distillation: bounce quiz	ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Chemistry 1" 4. Click on "Crude oil and fuels" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 172-183

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	13. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 14. On the left hand menu click on "science". Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
P1.1	Energy transfer	Pages 56-59	bitesize energy transfer by heating energy transfer by heating activity energy transfer by heating quiz bitesize buildings buildings quiz	heat transfer kinetic theory conduction convection condensation and evaporation	Go to "Physics" States of matter Venn diagram: states of matter Conduction of heat in solids Relative conductivities of metal rods Convection currents	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Physics 1" Click on "energy transfer by heating" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 222-242

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	15. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 16. On the left hand menu click on "science". 17. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
P1.2	Energy and Efficiency	Page 60	bitesize efficiency efficiency activity efficiency quiz bitesize	heat loss u-values specific heat capacity efficiency sankey diagrams payback times	Go to "Physics" Energy conversions and efficiency Energy transfer: bounce quiz	 ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Physics 1" 4. Click on "Electrical energy" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 252-257

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	18. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 19. On the left hand menu click on "science". 20.Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
P1.3	The usefulness of electrical appliances	Page 61	electricity cost	cost of electricity	Go to "Physics" © Electricity bills	ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Physics 1" 4. Click on "Electrical energy" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 258-262

Practise Exam Questions

As this is a new specification, there are very few past papers that can be used for practice. You can however, download the June 2012 series by clicking on the links below.

Two tiers of entry are available for this exam. Your child's teacher will uses internal assessments and their target grade to assess which tier is appropriate for them.

June 2012 Foundation Question paper http://filestore.aqa.org.uk/subjects/AQA-SCA1FP-QP-JUN12.PDF
June 2012 Foundation mark scheme http://filestore.aqa.org.uk/subjects/AQA-SCA1FP-W-MS-JUN12.PDF

June 2012 Higher tier question paper: http://filestore.aqa.org.uk/subjects/AQA-SCA1HP-QP-JUN12.PDF
June 2012 Higher tier mark scheme: http://filestore.aqa.org.uk/subjects/AQA-SCA1HP-W-MS-JUN12.PDF

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	10. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 11. On the left hand menu click on "science". 12. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.4	Interdependence and adaptation	23-25	bitesize adaptations adaptations activity adaptations quiz bitesize environmental change environmental change quiz skoool populations	competition and adaptation factors affecting distribution	There are no relevant e-chalk animations for this section	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Biology 1" Click on "Adaptation for survival" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 76-93

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	13. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 14. On the left hand menu click on "science". 15. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.5 and B1.6	Energy and biomass in food chains AND Waste materials from plants and animals	25 - 26	bitesize orgainisms and thier environment skoool ecology	energy in biomass the process of decay the carbon cycle	Go to "Biology" The carbon cycle Food chains Food webs Feeding relationships: key words	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Biology 1" Click on "energy in biomass" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 94-105

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	16. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 17. On the left hand menu click on "science". 18. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.7	Genetic variation and its control	27-29	bitesize variation variation quiz bitesize reproduction reproduction and cloning activity reproduction quiz	variation reproduction cloning genetic modification	Go to "Biology" Heredity Venn diagram: nature or nurture Chromosomes genes and DNA	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Biology 1" Click on "Variation, reproduction and new technology" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 106-121

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	19. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 20.On the left hand menu click on "science". 21. Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
B1.8	evolution	30-31	bitesize evolution evolution quiz	Darwins theory of evolution Darwin V's Lamark	Go to "Biology" Peppered moth natural selection simulation	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Biology 1" Click on "Evolution" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 122-133

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	21. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 22.On the left hand menu click on "science". 23.Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
<i>C</i> 1.5	Other useful substances from crude oil	45-47	bitesize alkenes alkenes activity alkenes quiz bitesize polymers and ethanol polymers from oil activity polymers from oil quiz skoool products from oil	polymers ethanol	Go to "Chemistry" Alkenes and alkanes Crude oil and fractional distillation: Bounce quiz	ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Chemistry 1" 4. Click on "products from oil" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 185-195

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	24.For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 25.On the left hand menu click on "science". 26.Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
<i>C</i> 1.6	Plant oils and their uses	48-49	bitesize plant oils plant oils activity plant oils quiz	emulsions fats plant oils	There are no relevant e-chalk animations for this section	ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Chemistry 1" 4. Click on "plant oils" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 196-205

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk On the left hand menu click on "science". Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
C1.7	Changes in the Earth and its atmosphere	50-53	bitesize the Earth's crust Earth's crust activity Earth's crust quiz Bitesize Earth's atmosphere Earth's atmosphere activity Earth's atmosphere quiz (Foundation) Earth's atmosphere quiz (Higher)	<u>fractional</u>	Go to "Geography" The structure of the Earth	 ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Chemistry 1" 4. Click on "our changing planet" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 206-221

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	27.For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 28.On the left hand menu click on "science". Use the info in the echalk games boxes, to navigate to the correct games	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
P1.4	Methods we use to generate electricity	62-64	bitesize generating electricity generating electricity activity generating electricity quiz	generating electricity alternative energy sources pumped storage national grid	Go to "Physics" The power station The transformer	ACTIVITIES 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE for AQA" 3. In the library section click on "Physics 1" 4. Click on "generating electricity" 5. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK 1. On the left hand side of the home page you will see "my courses" 2. Click on "Science A GCSE Kerboodle Book for AQA" 3. Read pages 262-291

Subject	subsection	Revision Guide Page Numbers	Approved online revision (direct links)	videos	 6. For e-chalk games go to www.echalk.co.uk. username = Wadebridge password = echalk 7. On the left hand menu click on "science". 8. Use the info in the echalk games boxes, to navigate to the correct games 	KERBOODLE user name = your ws number Password = password (unless you have changed it) Organisation code = 1481
P1.4	The use of waves	65-67	bitesize properties of waves properties of waves activity properties of waves quiz bitesize sound and light EM spectrum activity sound and light quiz bitesize redshift redshift quiz skoool waves 1 skoool waves 2 skoool big bang theory	electromagneti c spectrum reflection refraction diffraction amplitude and wavelength red-shift bitesize vids refraction	Go to "Physics" Moonlander: electromagnetic spectrum game The electromagnetic spectrum: bounce quiz Wave laboratory[improved] Virtual ripple tank Doppler shift simulation Reflection in a plane mirror Reflection balloon blast game Refraction Doppler shift of light Red shift (part 2 of 4) The expanding universe The age of the universe	 ACTIVITIES On the left hand side of the home page you will see "my courses" Click on "Science A GCSE for AQA" In the library section click on "Physics 1" Click on "waves" and "Electromagnetic waves" There are numerous tasks that you can do. Just click on them and follow the on-screen instructions E-TEXT BOOK On the left hand side of the home page you will see "my courses" Click on "Science A GCSE Kerboodle Book for AQA" Read pages 292-305

Practise Exam Questions

As this is a new specification, there are very few past papers that can be used for practice. You can however, download the June 2012 series by clicking on the links below.

Two tiers of entry are available for this exam. Your child's teacher will uses internal assessments and their target grade to assess which tier is appropriate for them.

June 2012 Foundation Question paper http://filestore.aqa.org.uk/subjects/AQA-SCA2FP-QP-JUN12.PDF
June 2012 Foundation mark scheme http://filestore.aqa.org.uk/subjects/AQA-SCA2FP-W-MS-JUN12.PDF

June 2012 Higher tier question paper: http://filestore.aqa.org.uk/subjects/AQA-SCA2HP-QP-JUN12.PDF
June 2012 Higher tier mark scheme: http://filestore.aqa.org.uk/subjects/AQA-SCA2HP-W-MS-JUN12.PDF

Stretch and challenge:

If you are looking for something extra to do after completing all of the above, please do the following

Biology:

- 1. Go to Kerboodle and log in as normal
- 2. On the left hand side of the home page you will see "my courses"
- 3. Click on "Science GCSE for AQA"
- 4. In the library section click on "Biology 1"
- 5. Click on "End of unit" and "Extension"
- 6. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions

Chemistry:

- 1. Go to Kerboodle and log in as normal
- 2. On the left hand side of the home page you will see "my courses"
- 3. Click on "Science GCSE for AQA"
- 4. In the library section click on "Chemistry 1"
- 5. Click on "End of unit" and "Extension"
- 6. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions

Physics:

- 1. Go to Kerboodle and log in as normal
- 2. On the left hand side of the home page you will see "my courses"
- 3. Click on "Science GCSE for AQA"
- 4. In the library section click on "Physics 1"
- 5. Click on "End of unit" and "Extension"
- 6. There are numerous tasks that you can do. Just click on them and follow the on-screen instructions