

Year Group	SOL	Read	Watch	View
7	Big and Small – The Universe	<ul style="list-style-type: none"> <li>- Unlocking the Universe – Stephen and Lucy Hawking</li> <li>- The extraordinary life of Katherine Johnson – Devika Jina</li> <li>- The extraordinary life of Neil Armstrong – Martin Howard</li> <li>- The extraordinary life of Stephen Hawking – Kate Scott</li> </ul>	Brian Cox – Wonders of the Universe – 1 season (2011) – Youtube (for clips)	<a href="https://www.newscientist.com/subject/s/page/">https://www.newscientist.com/subject/s/page/</a> <a href="https://oyla.uk/">https://oyla.uk/</a>
7	Big and Small – Earth's structure	<ul style="list-style-type: none"> <li>- The ultimate book of planet earth – Anne-Sophie Baumann</li> </ul>	<a href="https://youtu.be/JGXi_9A_Vc">https://youtu.be/JGXi_9A_Vc</a>	<a href="https://www.shalom-education.com/courses/ks3-chemistry/lessons/earth-and-the-atmosphere/topic/the-structure-and-composition-of-the-earth/">https://www.shalom-education.com/courses/ks3-chemistry/lessons/earth-and-the-atmosphere/topic/the-structure-and-composition-of-the-earth/</a> <a href="https://www.nationalgeographic.com/">https://www.nationalgeographic.com/</a> <a href="https://oyla.uk/">https://oyla.uk/</a>
7	Big and Small – Ecosystems	Ecosystems -The wondrous working of our Planet Earth – Rachel Ignofsky	Ecosystems <a href="https://www.youtube.com/watch?v=GfO-3Oir-qM">https://www.youtube.com/watch?v=GfO-3Oir-qM</a>	Ecosystems
7	Big and Small – Organisms and Cells	Organisms and cells		
7	Big and Small – Atoms	<ul style="list-style-type: none"> <li>- Chemistry for breakfast – The amazing science of everyday life – Dr. Mai Thi Nguyen-Kim</li> <li>- Nano – The spectacular science of the very (very) small – Dr. Jess Wade</li> </ul>	Atoms <a href="https://youtu.be/xazQRcSCRaY">https://youtu.be/xazQRcSCRaY</a> <a href="https://youtu.be/yQP4UJhNn0I">https://youtu.be/yQP4UJhNn0I</a> Periodic table <a href="https://youtu.be/fPnwBITSmgU">https://youtu.be/fPnwBITSmgU</a>	Building an atom <a href="https://phet.colorado.edu/en/simulations/build-an-atom">https://phet.colorado.edu/en/simulations/build-an-atom</a> The atom – building block of nature – science activity book - Pat and Barbara Ward <a href="https://www.nationalgeographic.com/">https://www.nationalgeographic.com/</a> <a href="https://oyla.uk/">https://oyla.uk/</a>
8	Life cycles – Growth and reproduction	<b>Digestion</b> The Quest to Digest – Mary Corcoran The Lucky Escape – Heather Manley <b>Reproduction</b>	Digestive system <a href="https://www.ted.com/talks/mia_nacamulli_how_the_food_you_eat_affects_your_brain?language=en">https://www.ted.com/talks/mia_nacamulli_how_the_food_you_eat_affects_your_brain?language=en</a> Nutrition	3D animation of digestive system <a href="https://www.youtube.com/watch?v=4NNMANwzmo">https://www.youtube.com/watch?v=4NNMANwzmo</a> New ways of making flour

		<p>What's happening to my body? Book for girls – Lynda Madaras</p> <p>The Body – Bill Bryson (A book to dip into)</p>	<p><a href="https://www.ted.com/talks/mia_nacamulli_how_the_food_you_eat_affects_your_brain?language=en">https://www.ted.com/talks/mia_nacamulli_how_the_food_you_eat_affects_your_brain?language=en</a></p>	<p><a href="https://www.bbc.co.uk/news/business-62646817">https://www.bbc.co.uk/news/business-62646817</a></p> <p>Female crocodile made herself pregnant</p> <p><a href="https://www.bbc.co.uk/news/science-environment-65834167">https://www.bbc.co.uk/news/science-environment-65834167</a></p>
8	Life cycles – Disease and forensics	<p><b>Disease</b></p> <p>Horrible Science – Deadly diseases</p> <p>Maria's Island – Victoria Hislop</p> <p>Twelve Diseases That Changed Our World – Irwin W Sherman</p> <p>Kay's marvellous medicine – Adam Kay</p> <p>The Body – Bill Bryson (A book to dip into)</p> <p><b>Forensics</b></p> <p>DNA Detectives – To Catch a Thief – Mandy Hartley</p> <p>What bugs, burns, prints, DNA and more tell us... - Val Mc Dermid</p>	<p><b>Disease</b></p> <p>Pathogens</p> <p><a href="https://www.youtube.com/watch?v=WsZS4RCWpcE">https://www.youtube.com/watch?v=WsZS4RCWpcE</a></p> <p><a href="https://www.youtube.com/watch?v=tTt8X75HLGc">https://www.youtube.com/watch?v=tTt8X75HLGc</a></p> <p>How are diseases spread</p> <p><a href="https://www.youtube.com/watch?v=vO51sFre6fg">https://www.youtube.com/watch?v=vO51sFre6fg</a></p> <p><b>Forensics</b></p> <p>Forensics for Kids</p> <p><a href="https://www.youtube.com/watch?v=4u-pdQvAp3A">https://www.youtube.com/watch?v=4u-pdQvAp3A</a></p> <p>Kid Science Forensic Lab</p> <p><a href="https://www.youtube.com/watch?v=JulKaMhGvgA">https://www.youtube.com/watch?v=JulKaMhGvgA</a></p>	<p><b>Disease</b></p> <p>Zika virus</p> <p><a href="https://www.bbc.co.uk/news/health-62000243">https://www.bbc.co.uk/news/health-62000243</a></p> <p>HPV jab</p> <p><a href="https://www.bbc.co.uk/news/health-62000243">https://www.bbc.co.uk/news/health-62000243</a></p> <p><b>Forensics</b></p> <p><b>BBC series</b></p> <p>Forensics: The Real CSI (may need parental guidance)</p> <p><a href="https://www.bbc.co.uk/programmes/m0004p7f">https://www.bbc.co.uk/programmes/m0004p7f</a></p>
8	Life cycles – Plant cycles	<p>The Secret World of Plants - Ben Hoare</p> <p>The Magic and Mystery of Trees – Jen Green, Claire McElphatrick</p>	<p>Plant life cycles</p> <p><a href="https://www.gardenersworld.com/plants/understanding-plant-life-cycles/">https://www.gardenersworld.com/plants/understanding-plant-life-cycles/</a></p> <p>Sexual reproduction in plants</p> <p><a href="https://www.youtube.com/watch?v=W90iGA5_mVs">https://www.youtube.com/watch?v=W90iGA5_mVs</a></p> <p>Asexual reproduction in plants</p> <p><a href="https://www.youtube.com/watch?v=K0SNi5yCtvU">https://www.youtube.com/watch?v=K0SNi5yCtvU</a></p>	<p>Decline in number of British plants</p> <p><a href="https://www.bbc.co.uk/news/science-environment-64842402">https://www.bbc.co.uk/news/science-environment-64842402</a></p> <p>Magical world of moss</p> <p><a href="https://www.bbc.co.uk/iplayer/episode/m001hqth/the-magical-world-of-moss">https://www.bbc.co.uk/iplayer/episode/m001hqth/the-magical-world-of-moss</a></p>
8	Life cycles – Changes	<p><b>Chemical changes</b></p> <ul style="list-style-type: none"> <li>- Science you can eat: putting what we eat under the microscope – Stefan Gates</li> <li>- What is chemistry all about:1 (what and why) – Alex Frith</li> </ul> <p><b>Forces</b></p> <ul style="list-style-type: none"> <li>- We have no idea – a guide to the unknown universe – Jorge Cham and Daniel Whiteson</li> </ul>	<p><b>Chemical changes</b></p> <p><a href="https://youtu.be/8m6RtOpqvtU">https://youtu.be/8m6RtOpqvtU</a></p> <p><b>Forces</b></p> <p><a href="https://youtu.be/uFls7AZ8pOw">https://youtu.be/uFls7AZ8pOw</a></p> <p><a href="https://youtu.be/E43-CfukEgs">https://youtu.be/E43-CfukEgs</a></p> <p><b>Energy</b></p> <p><a href="https://youtu.be/77ZF50ve6rs">https://youtu.be/77ZF50ve6rs</a></p> <p><a href="https://youtu.be/nbXXFtF8Lzs">https://youtu.be/nbXXFtF8Lzs</a></p>	<p>Young scientist journal</p> <p><a href="https://ysjournal.com/">https://ysjournal.com/</a></p>

		- The Ascent of Gravity: The Quest to Understand the Force that Explains Everything – Marcus Chown		
9	Environment: Earth's resources – Water, metals, crude oil and polymers			
9	Environment: Using the Earth's resources – Fuels, electricity, electrical circuits			
9	Environment: Biodiversity - Variation, inheritance, natural selection and selective breeding			
9	Fundamental concepts in Science – Energy (KS4 topic 1 physics)	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/energy/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/energy/</a>	Lots of short videos linked from this page. <a href="https://www.gcsephysicsonline.com/aqa-energy">https://www.gcsephysicsonline.com/aqa-energy</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UVC-8WVC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UVC-8WVC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=nbXXFtF8Lzs&amp;pp=ygUQZW5lcmd5IGJyaWFuIGNveA%3D%3D">https://www.youtube.com/watch?v=nbXXFtF8Lzs&amp;pp=ygUQZW5lcmd5IGJyaWFuIGNveA%3D%3D</a>
9	Fundamental concepts in Science – Atomic structure and the periodic table (KS4 topic 1 chemistry)	'Periodic tales' – Hugh Aldersey-Williams  'Elementary: The Periodic Table Explained' – James M. Russel	The Genius of Mendeleev's periodic table - <a href="https://ed.ted.com/lessons/the-genius-of-mendeleev-s-periodic-table-lou-serico">https://ed.ted.com/lessons/the-genius-of-mendeleev-s-periodic-table-lou-serico</a>  Periodic videos - <a href="https://www.youtube.com/channel/UCtEsv1e7ntJaLJYKI01FoYw">https://www.youtube.com/channel/UCtEsv1e7ntJaLJYKI01FoYw</a>	The Histories hidden in the periodic table <a href="https://www.newyorker.com/science/elements/the-histories-hidden-in-the-periodic-table">https://www.newyorker.com/science/elements/the-histories-hidden-in-the-periodic-table</a>  Interactive periodic table <a href="https://www.rsc.org/periodic-table">https://www.rsc.org/periodic-table</a>
9	Fundamental concepts in Science – Cells (KS4 topic 1 biology)			
KS4 BIO	Organisation part 1			
KS4 BIO	Organisation part 2			
KS4 BIO	Infection and response			
KS4 BIO	Bioenergetics			

KS4 BIO	Homeostasis and response			
KS4 BIO	Inheritance			
KS4 BIO	Ecology			
KS4 CHEM	Bonding and structure	'Symphony in C: Carbon and the evolution of (Almost) everything' – Robert M. Hazen	How atoms bond - <a href="https://ed.ted.com/lessons/how-atoms-bond-george-zaidan-and-charles-morton">https://ed.ted.com/lessons/how-atoms-bond-george-zaidan-and-charles-morton</a>	Graphene tattoo could save lives - <a href="https://edu.rsc.org/science-research/tattooing-the-heart-with-graphene-electrodes/4017512.article">https://edu.rsc.org/science-research/tattooing-the-heart-with-graphene-electrodes/4017512.article</a>
KS4 CHEM	Quantitative chemistry			
KS4 CHEM	Chemical changes			
KS4 CHEM	Energy changes			
KS4 CHEM	The rate and extent of chemical change			
KS4 CHEM	Chemistry of the atmosphere	'How Bad are Bananas? The Carbon Footprint of everything' – Mike Berners-Lee	What Earth's Early Atmosphere was like - <a href="https://www.youtube.com/watch?v=Gyn754vw8ZQ">https://www.youtube.com/watch?v=Gyn754vw8ZQ</a> 'The Martian' – Sci-Fi/Drama directed by Ridley Scott	Understanding our changing atmosphere <a href="https://edu.rsc.org/feature/understanding-our-changing-atmosphere/2020269.article">https://edu.rsc.org/feature/understanding-our-changing-atmosphere/2020269.article</a>
KS4 CHEM	Chemical analysis			
KS4 CHEM	Organic chemistry			
KS4 CHEM	Using resources		What if all the sea water becomes fresh water? <a href="https://ed.ted.com/best_of_web/fiiPeGpJ?lesson_collecti on=actions-and-reactions">https://ed.ted.com/best_of_web/fiiPeGpJ?lesson_collecti on=actions-and-reactions</a>	
KS4 PHYS	Energy part 2	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/energy/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/energy/</a>	Lots of short videos linked from this page. <a href="https://www.gcsephysicsonline.com/aqa-energy">https://www.gcsephysicsonline.com/aqa-energy</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV-C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV-C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=c17t_Pf8vl4&amp;pp=ygUQZW5lcmd5IGJyaWFuIGNveA%3D%3D">https://www.youtube.com/watch?v=c17t_Pf8vl4&amp;pp=ygUQZW5lcmd5IGJyaWFuIGNveA%3D%3D</a>
KS4 PHYS	Electricity	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/electricity/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/electricity/</a>	Lots of short videos linked from this page, some require a subscription. <a href="https://www.gcsephysicsonline.com/aqa-electricity">https://www.gcsephysicsonline.com/aqa-electricity</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV-C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV-C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=Gtp51eZkwol&amp;pp=ygULZWxlY3RyaWNpdHk%3D">https://www.youtube.com/watch?v=Gtp51eZkwol&amp;pp=ygULZWxlY3RyaWNpdHk%3D</a>

KS4 PHYS	Particle model of matter	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/particle-model-of-matter/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/particle-model-of-matter/</a>	Lots of short videos linked from this page, some require a subscription. <a href="https://www.gcsephysicsonline.com/aqa-particles">https://www.gcsephysicsonline.com/aqa-particles</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=184eP_KuXek&amp;pp=ygUQc3RhdGVzIG9mIG1hdHRIcg%3D%3D">https://www.youtube.com/watch?v=184eP_KuXek&amp;pp=ygUQc3RhdGVzIG9mIG1hdHRIcg%3D%3D</a>
KS4 PHYS	Atomic structure	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/atomic-structure/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/atomic-structure/</a>	Lots of short videos linked from this page, some require a subscription. <a href="https://www.gcsephysicsonline.com/aqa-atomic-structure">https://www.gcsephysicsonline.com/aqa-atomic-structure</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=Ml1bk9wDXVo&amp;pp=ygUQYXRvbWljIHNOcnVjdHVyZQ%3D%3D">https://www.youtube.com/watch?v=Ml1bk9wDXVo&amp;pp=ygUQYXRvbWljIHNOcnVjdHVyZQ%3D%3D</a>
KS4 PHYS	Forces 1	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/forces/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/forces/</a>	Lots of short videos linked from this page, some require a subscription. <a href="https://www.gcsephysicsonline.com/aqa-forces">https://www.gcsephysicsonline.com/aqa-forces</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=KT-lzqMDzO0&amp;list=PL5A4nPQbUF8AfZuoNUm7T-KY98c1Rb82T">https://www.youtube.com/watch?v=KT-lzqMDzO0&amp;list=PL5A4nPQbUF8AfZuoNUm7T-KY98c1Rb82T</a>
KS4 PHYS	Waves	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/waves/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/waves/</a>	Lots of short videos linked from this page, some require a subscription. <a href="https://www.gcsephysicsonline.com/aqa-waves">https://www.gcsephysicsonline.com/aqa-waves</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=yNntDhr2n4g&amp;pp=ygUQaGlzdG9yeSBvZiBsaWdodA%3D%3D">https://www.youtube.com/watch?v=yNntDhr2n4g&amp;pp=ygUQaGlzdG9yeSBvZiBsaWdodA%3D%3D</a>
KS4 PHYS	Magnetism and electromagnetism	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/magnetism-and-electromagnetism/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/magnetism-and-electromagnetism/</a>	A summary video: <a href="https://www.youtube.com/watch?v=0YIAA4LlkQI&amp;pp=ygUWR0NTRSBQaHlzaWNzIE1hZ25ldGJzbQ%3D%3D">https://www.youtube.com/watch?v=0YIAA4LlkQI&amp;pp=ygUWR0NTRSBQaHlzaWNzIE1hZ25ldGJzbQ%3D%3D</a> Another summary videos: <a href="https://www.youtube.com/watch?v=mnigg3MGsly&amp;pp=ygUWR0NTRSBQaHlzaWNzIE1hZ25ldGJzbQ%3D%3D">https://www.youtube.com/watch?v=mnigg3MGsly&amp;pp=ygUWR0NTRSBQaHlzaWNzIE1hZ25ldGJzbQ%3D%3D</a>	<a href="https://www.youtube.com/watch?v=fiz8TBGlshw&amp;pp=ygUUAaGlzdG9yeSBvZiBtYWduZXRpc20%3D">https://www.youtube.com/watch?v=fiz8TBGlshw&amp;pp=ygUUAaGlzdG9yeSBvZiBtYWduZXRpc20%3D</a>
KS4 PHYS	Space (TRIPLE)	PMT – notes, definition, mind maps and question with answers. <a href="https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/space-physics/">https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/space-physics/</a>	<a href="https://www.youtube.com/watch?v=42E5A4IMMnk&amp;pp=ygUSR0NTRSBQaHlzaWNzIEFNwYWNl">https://www.youtube.com/watch?v=42E5A4IMMnk&amp;pp=ygUSR0NTRSBQaHlzaWNzIEFNwYWNl</a> A playlist of videos for all sections: <a href="https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7">https://www.youtube.com/playlist?list=PLidqqIGKox7UV C-8WC9djoeBzwxPeXph7</a>	<a href="https://www.youtube.com/watch?v=wkQuOrsgVGY&amp;pp=ygUFC3BhY2U%3D">https://www.youtube.com/watch?v=wkQuOrsgVGY&amp;pp=ygUFC3BhY2U%3D</a>