



SUPER CURRICULUM

Years 7 to 8



Reading



- Brief Answers to the Big Questions by Stephen Hawking
- Hitchhiker's Guide to the Galaxy by Douglas Adams
- Why is snot green? by Glenn Murphy
- How loud can you burp? by Glenn Murphy

Watching



- <https://scienceatschool.co.uk/tag/ks3/>
- <https://www.youtube.com/watch?v=nDN7M0J3HXc>
- <https://www.bbc.co.uk/bitesize/subjects/zh2xsbk>
- <https://www.purposegames.com/playlist-tag/physics>
- TV: Mythbusters, The Sky at Night, Horizon, The Big Bang Theory, Wonders of the Universe, Wonders of the Solar System, Edge of the Universe
- Films: The Martian, Apollo 13, Gravity, Hidden Figures

Listening



- 'The Infinite Monkey Cage' hosted by Physicist Brian Cox and Comedian Robin Ince where a panel discusses scientific issues and breakthroughs with a group of comedians and experts. <https://www.bbc.co.uk/sounds/brand/b00snr0w>
- 'The curious case of Rutherford and Fry' hosted by Dr Adam Rutherford and Dr Hannah Fry where they answer questions sent in by listeners about curious questions that you may have in everyday life. <https://www.bbc.co.uk/programmes/b07dx75g>

Doing



- KS3 Physics Olympiad [Junior Physics Challenge](#)
- KS3 Experiments here <https://spark.iop.org/collections/marvin-and-milo>



SUPER CURRICULUM

GCSE (Years 9 to 11)



Reading



- A Short History of Nearly Everything by Bill Bryson.
- Big Bang: The Most Important Scientific Discovery of All Time and Why You Need to Know About It by Simon Singh.
- The Making of the Atomic Bomb by Richard Rhodes.
- Six Easy Pieces: Fundamentals of Physics Explained by Richard P Feynman (or any other book by the same author).

Watching



- <http://www.iop.org/resources/videos/education/>
- <http://www.youtube.com/user/minutephysics>
- <http://research.microsoft.com/apps/tools/tuva/>
- <https://www.bbc.co.uk/iplayer/search?q=physics>
- TV: Mythbusters, The Sky at Night, Horizon, The Big Bang Theory, Wonders of the Universe, Wonders of the Solar System, Edge of the Universe, Chernobyl
- Films: The Theory of Everything, Einstein and Eddington, Infinity, Particle Fever, Hidden Figures

Listening



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Doing



- KS4 Physics Olympiad [Junior Physics Challenge](#)
- KS4 Citizen Science Experiments here <https://www.zooniverse.org/projects?discipline=physics&page=1&status=live>
- <https://science.nasa.gov/citizenscience>
- Online events: <https://www.rigb.org/whats-on>
- Online MOOCs: Evolution of the universe from the Big Bang to Dark Energy <https://www.coursera.org/learn/big-bang>
- A Brief Guide to everything: A course on particle physics. This course helps you understand what we do know and the questions that are still to be answered about our universe. <https://iai.tv/iai-academy/courses/info?course=a-brief-guide-to-everything>
- How Things Work: An Introduction to Physics <https://www.coursera.org/learn/how-things-work>



SUPER CURRICULUM

A Level (Sixth Form)



Reading



- The Cosmic Onion (Close).
- In Search of the Edge of Time (Gribbin).
- Quantum Physics: Illusion or Reality (Rae).
- The Feynman Lectures on Physics (Feynman, Leighton, Sands).

Watching



- <http://www.iop.org/resources/videos/education/>
- <http://www.youtube.com/user/minutephysics>
- <http://research.microsoft.com/apps/tools/tuva/>
- <https://www.bbc.co.uk/iplayer/search?q=physics>
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- Films: The Theory of Everything, Einstein and Eddington, Infinity, Particle Fever, Hidden Figures

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Doing



- KS5 Student review panel for Physics Review magazine.
- <https://outreach.phy.cam.ac.uk/programme/cpc>
- <https://nustem.uk/physics-experience-week/>
- KS5 Physics Olympiad [Senior Physics Challenge](#)