



Pearson
Edexcel

GCSE (9-1) Astronomy

Resources list



Support for the teaching of
Astronomy

RESOURCES FROM PEARSON

What's on our website?

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/astronomy-2017.html>

The GCSE Astronomy pages of the Pearson Edexcel website contain everything you need to plan and start teaching the course.

This includes:

- specification
- sample assessment materials
- course planner and scheme of work
- topic support guides for:
 - archaeoastronomy
 - building planetary systems
 - celestial sphere
 - measuring the Solar System
 - sailing by the stars
 - stellar evolution
- guide for observational skills
- past papers with mark schemes and examiner reports
- question bank of past paper questions

RESOURCES FROM OTHER ORGANISATION

The following organisations provide resources and activities to support the teaching of GCSE Astronomy:

Association for Astronomy Education

The Association for Astronomy Education allows those involved in the teaching of astronomy both at GCSE and beyond to share ideas and resources. www.aae.org.uk

British Horological Institute

The British Horological Institute's website is the place for those interested in the details of how clock mechanisms have been engineered over the years, essentially to replicate the astronomical motions which are the foundation of our systems of time measurement. www.bhi.co.uk

British Museum

The British Museum in central London contains a vast range of exhibits of all kinds related to the history of astronomy. Their website has resources specifically designed for schools, colleges and learners. www.britishmuseum.org

British Sundial Society

The British Sundial Society's website and magazine cover the detailed workings of sundials as one of the first means for using astronomical patterns to provide a measure of time. www.sundialsoc.org.uk

Institute of Physics

The Institute of Physics provides resources to support the teaching of all aspects of physics, including astronomical and astrophysical topics. www.iop.org/education/teacher/index.html

Mr Fry's Collection

By kind permission of The Grammar School at Leeds, the fascinating teaching notes and detailed examination question solutions produced by Derek Fry in his half-century of teaching GCSE (and O-level) Astronomy are available online for all teachers of the subject to share.

www.gsal.org.uk/gsal-archive/mr-frys-astronomy-archives/

NASA Educators

The Educators section of the NASA website contains a wide range of resources to support students and teachers learning about many of the astronomical topics covered in this qualification. www.nasa.gov/audience/foreducators/index.html5

Robotic Telescopes

There are a number of organisations that allow students to take or schedule observations on robotic telescopes via the internet. These include:

Bradford Robotic Telescope (www.telescope.org)

Faulkes Telescope (www.faulkes-telescope.com/)

NASA MicroObservatory (<https://mo-www.cfa.harvard.edu/OWN/index.html>)

National Schools' Observatory (www.schoolsobservatory.org/)

Royal Astronomical Society

The Education and Outreach section of the Royal Astronomical Society's website contains details of a wide range of resources to support teachers and learners of GCSE Astronomy. In particular, their Leaflets for Schools provide authoritative support in several key areas of the qualification. <https://ras.ac.uk/education-and-careers>.

Royal Greenwich Observatory

The Royal Greenwich Observatory website contains resources relevant to many of the topics covered in the GCSE Astronomy course. The observatory was itself the site of some of the major astronomical discoveries studied in the GCSE Astronomy qualification. It is therefore a unique location for students of GCSE Astronomy to visit. It also houses the four Harrison Marine Chronometers, H1, 2, 3 & 4.

www.rmg.co.uk/royal-observatory

Science Museum

The Science Museum in central London has a large collection of artefacts related to the study of astronomy through the ages. Its website provides resources for schools and those studying many aspects of astronomy.

www.sciencemuseum.org.uk

Science & Technology Facilities Council 'Borrow the Moon' Scheme

This free service allows schools and colleges to borrow samples of lunar rock brought back by the Apollo missions in the 1960s/70s, along with some examples of meteorites. The loan includes materials and equipment to support a wide range of related activities for students of all ages. <https://stfc.ukri.org/public-engagement/activities-for-schools/borrow-the-moon/>

Society for Popular Astronomy

The Society for Popular Astronomy supports both beginners and experienced amateur astronomers via its website, newsletter and programme of regular events.

www.popastro.com/main_spa1/

Society for the History of Astronomy

The Society for the History of Astronomy provides its members with a regular newsletter which covers aspects of the historical development of astronomy from across the millennia. www.societyforthehistoryofastronomy.com

Worshipful Company of Clockmakers

The Worshipful Company of Clockmakers' museum in the City of London is a unique collection of the work of London's great clockmakers of the eighteenth century, many of whom were engaged with making accurate clocks for astronomers and attempting to design clocks to solve the Longitude Problem. It also includes John Harrison's final clock - H5. www.clockmakers.org