



South Lincolnshire

Academies Trust

Careers Education

JOB

OF THE WEEK

Aspire | Challenge | Achieve

JOB

OF THE WEEK

Our Job of the week this week is an
Astronomer



Job of the Week – Astronomer

WHAT YOU DO

In **observational astronomy**, your duties might include:

- Collecting and analysing data from satellites and spacecraft
- Exploring space using radio and optical telescopes
- Designing new instruments and maintaining existing equipment
- Developing software to interpret images/data captured by satellites

In **theoretical astronomy**, your duties may include:

- Creating models to test theories about processes happening in space
- Analysing the results of past observations to make new predictions
- Making observations and developing theories
- Analysing data to help build our understanding of events

SKILLS REQUIRED

- Maths knowledge
- Knowledge of physics
- Analytical thinking skills
- Science skills
- Excellent verbal communication skills
- The ability to use your initiative
- The ability to think clearly using logic and reasoning
- Concentration skills
- To be able to use a computer and the main software packages competently

WHAT YOU WEAR

Smart casual wear



WORKING CONDITIONS

In an observatory, a laboratory or at a university

WORKING HOURS

39-41
With irregular days/ hours and away from home

ANNUAL LEAVE

29 days
Per year



ANNUAL INCOME

Starter £15,000
Experienced £60,000



EDUCATION & EXPERIENCE

The only current route is through University: 5 GCSE 9-4 including Math's & English, 2/3 A Levels including Maths & Physics & a degree in a relevant subject for postgraduate study.

You will need a degree and postgraduate qualification to work as an astronomer. Your degree will usually need to be a first or upper second-class.

Relevant subjects include:

- Maths
- Physics
- Astrophysics
- Geophysics
- Astronomy
- Space science

You can also do an extended 4-year degree to get a postgraduate qualification like a master of physics. These courses include more independent research and can lead directly onto a PhD. Many employers will expect you to have completed, or be working towards, a PhD in your specialist area of interest.

Labour Market Information

In the Careers section of the school website you can find the useful comparison tool the 'Labour Market Information widget'

Use the widget to compare different job roles in any employment sector or relating specifically to the 'Job of the Week'.

Physical scientists		Natural and social science professionals n.e.c.		Laboratory technicians	
Weekly Pay £960	Annual Pay £49,920	Weekly Pay £840	Annual Pay £43,680	Weekly Pay £440	Annual Pay £22,880
Hours/Week 42h	Hourly Pay £23	Hours/Week 41h	Hourly Pay £20	Hours/Week 34h	Hourly Pay £13
Workforce Change (projected)		Workforce Change (projected)		Workforce Change (projected)	
Growth 5.1%	Replacement 39.9%	Growth 5.1%	Replacement 39.9%	Growth 1%	Replacement 43.2%
The workforce is projected to grow by 5.1% over the period to 2027, creating 1,500 jobs. In the same period, 39.9% of the workforce is projected to retire, creating 12,000 job openings.		The workforce is projected to grow by 5.1% over the period to 2027, creating 2,300 jobs. In the same period, 39.9% of the workforce is projected to retire, creating 18,000 job openings.		The workforce is projected to grow by 1% over the period to 2027, creating 1,000 jobs. In the same period, 43.2% of the workforce is projected to retire, creating 42,600 job openings.	
You might find this job in Architectural & related Scientific research Education Head offices, etc Health		You might find this job in Education Scientific research Public admin. & defence Office admin.		You might find this job in Education Health Architectural & related Scientific research Public admin. & defence	
More info	Clear card	More info	Clear card	More info	Clear card

Physical scientists

Physical scientists study relationships between matter, energy and other physical phenomena, the nature, composition and structure of the Earth and other planetary bodies and forecast weather conditions and electrical, magnetic, seismic and thermal activity.

Common tasks in this job:

- conducts experiments and tests and uses mathematical models and theories to investigate the structure and properties of matter, transformations and propagations of energy, the behaviour of particles and their interaction with various forms of energy;
- uses surveys, seismology and other methods to determine the earth's mantle, crust, rock structure and type, and to analyse and predict the occurrence of seismological activity;
- observes, records and collates data on atmospheric conditions from weather stations, satellites, and observation vessels to plot and forecast weather conditions;
- applies mathematical models and techniques to assist in the solution of scientific problems in industry and commerce and seeks out new applications of mathematical analysis.

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Natural and social science professionals n.e.c.

Jobholders in this unit group perform a variety of scientific research and related activities not elsewhere classified in MINOR GROUP 211: Natural and Social Science Professionals.

Common tasks in this job:

- plans, directs and undertakes research into natural phenomena;
- provides technical advisory and consulting services;
- designs tests and experiments to address research objective and find solutions;
- applies models and techniques to medical, industrial, agricultural, military and similar applications;

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Laboratory technicians

Laboratory technicians carry out routine laboratory tests and checks, and perform a variety of technical support functions requiring the application of established or prescribed procedures and techniques to assist scientists with their research, development, analysis and testing, and to verify the physical, chemical and other characteristics of materials and products.

Common tasks in this job:

- sets up and assists with the construction and the development of scientific apparatus for experimental, demonstration or other purposes;
- prepares and analyses body fluids, secretions and/or tissue to detect infections or to examine the effects of different drugs;
- grows cultures of bacteria and viruses, prepares tissue sections and other organic and inorganic material for examination and stains and fixes slides for microscope work;
- operates and services specialised scientific equipment, undertakes prescribed measurements and analyses and ensures that sterile conditions necessary for some equipment are maintained;

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To compare the Labour Market Information of different job roles that you might be interested in please visit the Careers section on the school website.

JOB

OF THE WEEK

Click on the website links to research the job role further:

[Astronomer | Explore careers | National Careers Service](#)

[Astronomer job profile | Prospects.ac.uk](#)

[SpaceCareers.uk](#)

[How To Become An Astronomer | UCAS Progress | UCAS](#)

[UK Space Agency - GOV.UK \(www.gov.uk\)](#)