Applied Science support pack

Teacher guidance

Organisation(s) being represented

This activity was developed by Huddersfield New College

Title of activity

A day in the life of...

Type of teaching material

Student independent research, role play and presentation

Learning topic

Using science in organisations

Learning objectives

Students research in detail one job role involving science, and each shares their findings with the class.

Students develop presentation skills.

Outline of activity

Students are allocated a job role which involves science. They research the role and prepare a presentation describing a typical day in their life as someone performing that job.

Suggested time for delivery

Half an hour to introduce activity. (Suggest lots are drawn to allocate roles.)

Three hours to research and prepare (this may include homework time).

Ten minutes per student to deliver presentation to class (some will usefully fill nowhere near this long, but it allows for questioning, getting PowerPoint to work, etc).

Preparation/resources needed

Instruction sheet provides instructions and suggested websites.

Activities and tasks

Details are given on the instruction sheet.

Linked activities

This activity links with Activity 4.



Student activity sheet

What the activity is about

This activity involves finding out about jobs which involve science.

What you will do

You will be allocated a science-based job role. You must imagine that you do that job and prepare a presentation to your class of approximately five minutes' duration, describing a typical day in your working life. You will need to thoroughly research the job using careers information. Some useful websites are listed on the instruction sheet for the activity.

Useful resources

A range of websites is listed on the instruction sheet. You will also be able to find useful information from the careers department in your school or college.

Investigating careers in science: A day in the life of...

Your A-level in Applied Science can lead to a wide range of careers.

Some can be entered directly after completing your A-level studies with on-the-job training or higher education by day release. Others are entered after a full-time course in higher education leading to a relevant HND, degree or postgraduate qualification.

You will be allocated one of following science-based job roles. You should research the job role and prepare a presentation describing 'A day in my life as a...'.

- 1. Technical officer in food control. You are responsible to a principal officer in a medium-sized local authority.
- 2. Occupational therapist working in the NHS. Fully trained, you report to a senior occupational therapist but manage your own caseload.
- 3. Scene-of-crime officer for a regional police force. You undertake your own casework.
- 4. Production manager. You work for a chemical company producing detergents.
- 5. Arboricultural officer (tree officer). You work for a local authority.
- 6. Quality assurance technician. You work for a dyestuff manufacturer.
- 7. Medical laboratory scientist. You work shifts in the clinical chemistry department of a large teaching hospital.
- 8. Environmental health officer. You work for a travel firm which has interests in the UK and in Europe.
- 9. Health and safety officer. You work for a large FE college which provides a wide range of courses including engineering, construction and laboratory-based subjects.
- 10. Method development chemist. You work for a pharmaceutical company developing methods of analysis for new drugs.
- 11. Patent examiner. You work for the patent office specialising in polymers and fibres.
- 12. Journalist for a local paper. You are the science correspondent and are expected to write features on aspects of science relevant to the local area.
- 13. Fundraiser for a medical charity. You are responsible for campaigns raising money to fund research.
- 14. Chemical process technician working for a large agrochemical manufacturing company. You work shifts and your job is to operate and maintain sophisticated chemical manufacturing plants. (The job could also be called process operator.)
- 15. Radiographer. You work in the local general hospital.
- 16. Optometrist. You work for a major high-street chain of opticians.
- 17. Hospital consultant working in the local general hospital. You may choose your own specialism for your presentation.
- 18. Science teacher in a secondary school.
- 19. Dental hygienist. You work in a dental practice supporting a team of three dentists.
- 20. Metallurgist. You are employed by a major international steel manufacturer.
- 21. Health and safety inspector working for the Health and Safety Executive.



Getting started

1. Consider the type of science involved. Your job may focus on biology, chemistry or physics, or may involve aspects of all these areas

Professional associations provide background information on careers in these areas.

Biology The Institute of Biology <u>www.iob.org</u>
Chemistry The Royal Society of Chemistry <u>www.rsc.org</u>

Chemical engineering The Institution of Chemical Engineers <u>www.icheme.org</u>

Physics The Institute of Physics <u>www.iop.org</u>

Physics careers <u>www.careers.iop.org</u>

2. Consider the type of qualification your job needs

 Degree or postgraduate qualification <u>www.prospects.ac.uk</u> careers for graduates

■ On the job training

<u>www.careers-gateway.co.uk</u> general careers information

■ Check on requirements for degree courses www.ucas.com/ucc/index.html

3. You will need to decide what sort of employer you are working for

■ Private sector

This includes small, medium and large companies run for profit and includes the self-employed. www.prospects.ac.uk

Public sector

National government (the civil service) www.careers.civil-service.gov.uk Local authorities www.lgcareers.com,
The health service www.nhscareers.nhs.uk/careers/
Defence forces and police

■ Voluntary sector
Charities and non-profit organisations
www.wfac.org.uk links with major charities
www.wellcome.ac.uk
www.peopleandplanet.org

4. Developing your presentation

■ You can get ideas for 'a day in the life of…' by looking at the case studies on websites such as: www.ypnet.org.uk

www.nhscareers.nhs.uk/careers/

- Include a range of different tasks that you might have to carry out in your job. Some of these will directly involve science, but others may involve more general work with people. Explain who you are answerable to (ie who your boss is) and who, if anyone, is answerable to you.
- Prepare two or three slides to illustrate your talk; you should include the qualifications and training you needed to get to your current position, and any training or professional development you are currently undertaking.
- 5. Be ready to answer questions from other members of your group who are working on different jobs, and be ready to ask them about their 'day in the life of...'.