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THE THIRD AGE TRUST



THE UNIVERSITY OF THE THIRD AGE

# Science

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Subject Adviser

## Starting a Group

There are hundreds of Science groups in U3As across the country so clearly there is a demand. When starting a group, do talk with the Groups Coordinator, or person with a similar title, in your U3A for general advice and support. Discuss with your Treasurer the finance aspects. Consider the following:

- What are the aims of your group? Is your group for everyone as many members will not have done science since school but are keen to know about the world around them (the usual) or specifically for people with a science background (uncommon)?
- Do you want to cover the full spectrum of science and technology or have a more specific focus, e.g. Astronomy, Biology, Climate Change, Geology, Mathematics or Psychology? There are U3A Subject Advisers for each of these specialties.
- Perhaps think of a title to reflect your aims, e.g. Science for Everyone, as “Science” alone can be off-putting for some people.
- Consider the format of your meetings (see below)
- What will be the frequency of meetings, the venue and the facilities you need appropriate to your format (e.g. screen and ability to use a projector; possibly internet access; kitchen for refreshments). Perhaps start the group in someone’s house and move to another bookable venue when numbers will support the cost.
- As well as you organizing the Group, have other people to provide input of ideas, cover for holidays, be a possible future organizer, etc.

## What Format?

Most groups use a mixture of talks and visits but there are many other formats to add variety.

### Talks

The U3A ethos is for members to teach and to learn from other members. That works well in many groups, particularly smaller groups. When people join, ask their expertise and whether they might be willing to give a talk or lead a discussion. As groups grow in size, many members become reluctant to speak in front of a larger group. Perhaps suggest that 2 or 3 members give short talks of say 15 minutes each to encourage participation. There may be U3A members within your U3A with scientific knowledge, e.g. in cookery, photography and wine tasting groups.

Most talks are one off topics lasting 45-60 minutes plus discussion, although some U3A groups run a series of talks on a theme.

### Some topics from the world around us

Science of cooking, brewing, bread making and composting; The physics of cycling; Electricity from generation to the home; Electric cars; Climate change; Plastics; Origins and history of foodstuffs such as chocolate; Devices such as pacemakers, phones and computers. Science used in other fields, e.g. archaeology and gardening.

### Sources of ideas for talks

Science articles in daily newspapers and on TV; magazines such as New Scientist.

### Resources and sources for speakers

- The U3A Resource Centre has hundreds of books, CDs, DVDs and PowerPoint presentations on science. They can be borrowed for free but you pay postage for their return. The Resource Centre is part of U3A National office and details are on the U3A website (<https://library.u3a.org.uk/liberty/libraryHome.do>), tel. 020-8315-0199.
- There are many people in the wider world who are very willing to talk to groups such as the U3A, who are good communicators with great expertise and often will speak for free or for just travel expenses. Many groups make use of such external speakers.

- Relatives of your U3A members may be currently employed in science and technology and be willing to talk about current developments.
- Speak to people running science groups in other local U3As. Look at the websites for other local organizations such as Probus, Rotary and Café Scientifique for speakers.
- Maybe you have a College or University nearby with people prepared to give talks.
- Speakeeze (<https://www.speakeeze.org>) is a searchable nation-wide database of people from Universities and industry willing to give talks on a whole range of topics to groups.
- Members of local groups of professional bodies (such as Institute of Physics, The Royal Society of Chemistry, IET The Institute of Engineering and Technology, the Royal Society of Biology) may be willing to speak.
- In mid-May each year, Pint of Science organizes science talks across over 30 cities and you can look at previous talks and speakers for ideas (<https://pintofscience.co.uk>).
- Don't forget that many of your members will have contacts of potential speakers

## Visits

Many groups add variety by doing one or more visits a year. Possible venues are heritage railways, museums, nature reserves, Sites of Special Scientific Interest, Universities, weather stations, zoos and industrial sites (such as bakeries, breweries, distilleries, power stations and recycling plants). Again, consult with established local organizations (or look at their websites) for ideas. The U3A has a social aspect as well as learning and visits encourage that aspect. Consult with your U3A Treasurer as how to do the costing.

## Discussion groups

Discussion groups can be a good way of encouraging all members to actively participate but can sometimes be challenging to organize and run, particularly as some members may feel that they lack expertise. The key is to produce a relaxed atmosphere where everyone's opinion counts. Just some of the approaches:

- The Group leader and/or members choose a topic and members are asked to do some research prior to a meeting.
- Some topics, such as speculating on what the technology of the world will look like in say 20 years, do not need preparation. Put your members into syndicate groups of say 5-6 members, ask them to discuss a specific area (e.g. health and social care; work; transport; communications, energy) and ask one from each group to present their group's views to the whole meeting
- Show a short DVD or TED talk (<https://www.ted.com/talks>) and discuss issues raised.
- Display a free poster from the Open University (<http://www.open.edu/openlearn/get-started/order-your-free-print-items#>) and discuss.
- Ask you members to look at a free MOOC (Massive Open Online Course) such as from FutureLearn (<https://www.futurelearn.com>) in advance of a meeting and discuss.
- Run a quiz where members work in small groups.

## Other formats

A few groups have run meetings where they do some practically-based science (e.g. looking through microscopes) but do consider safety aspects. Contact National Office about insurance. They will want to know about the relevant expertise of the Group Coordinator, the suitability of the venue and whether a risk assessment has been carried out.

Some groups have been involved in various types of scientific research. Your members may wish to be involved in citizen science projects whereby volunteers assist academic researchers. An example is Zooniverse ([www.zooniverse.org.uk](http://www.zooniverse.org.uk)). The booklet "Getting Involved in Research" is posted on the National U3A website (<https://www.u3a.org.uk/resources/subjects/300-research>).

Science and technology are good topics for a Study Day within a U3A Network.

## Other U3A activities

The U3A Science Network organizes an annual 3-day meeting each August that has been running since 2003. For details go to [www.u3asciencenetwork.uk](http://www.u3asciencenetwork.uk) Here you have the opportunity to hear some dozen talks, see practical demonstrations, go on a visit to a place of scientific or technological interest and meet with U3A members from across the country interested in science. On this website are links to U3A science groups that use U3A Sitebuilder as a platform for their website.

There are several other U3A Summer Schools, either organized by National Office or regionally, that usually have a science element. Details are posted on the National U3A website (<https://www.u3a.org.uk/events/summer-schools> ).

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