

Event guide for secondary school S

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Introduction to Biology Week

Biology Week is an annual celebration of biology with events all over the UK and beyond for everyone, regardless of background in biology. The week is a great opportunity to share a passion for biology and the natural world.

This pack has been produced to help secondary school teachers who are looking for ways for their class or school to be involved in this celebration of the knowledge of the natural world; you can hold events in your classroom, playground or within your school community as part of Biology Week.

The week celebrates the whole of biosciences and encompasses events and activities that appeal to all audiences.

Topics covered in the past have included citizen science projects, conservation, dinosaurs, drug development, mental health, biochemistry, physiology, fungi and more.

Around 100 events and activities take place during the week. These have included:

- · A debate on the implications of using DNA to predict cancer
- Nationwide polls to find the UK's favourite species
- UK Fungus Day
- Bioscience Careers Day
- Starling murmuration survey
- BioArt Attack competitions
- BioBakes competitions
- 24 hour lecturethons
- · Workshops on food security and recycling
- · Trips to museums, wildlife reserves and zoos
- Biology pub quizzes

This year's Biology Week calendar can be found on the Royal Society of Biology (RSB) website: www.rsb.org.uk

Why take part in Biology Week?

Biology Week is a great way to showcase the diversity of the biosciences, get pupils enthused and more involved with the subject, and do something creative and different in the classroom, playground or even outside of school.

You can plan your own event or activity for Biology Week or contribute to a suitable event featured on our online calendar: www.rsb.org.uk/2017calendar

We can then help advertise your event, and provide branding and other communication tools if you want to reach out to a wider audience or get the local community involved too.

Through the week, we aim to share your passion for biology with as many people as possible. Your support will allow us to maximise the impact and coverage of events and activities to give people of all ages and backgrounds the chance to learn about the biosciences.

Help us achieve our vision of a world that understands the true value of biology and how it can contribute to improving life for all.



Different event ideas

There are many event formats and ideas, and if you find one that works well, it is certainly worth using it again. The suggested examples below are suitable for a wide range of locations and budgets, although some may be more suited for certain year groups.

Below are some ideas for events you could run during Biology Week:

Biology Quiz

Running a biology quiz is a simple and effective means of engaging an audience with whatever biological topics you want to tackle, and the difficulty of the quiz can easily be tailored to your class level.

Talks and debates

Scientists from local universities, charities or companies make ideal speakers for Biology Week. They can give talks or even join a panel discussion around a particular topic. This can take place in a classroom, during an assembly or as part of a debate club meeting if your school has one.

Visiting a laboratory at a local university

Some universities will already have outreach schemes in place in which secondary schools can take part, so check ahead with your local institutions. This may be especially worthwhile for older students who are thinking about applying to university.

Pairing the visit with a talk or discussion from some of the academics there is a great way to give students an insight into how labs work and how scientific research is conducted.

Hands-on activities and demonstrations

This is a great way to develop the outreach and engagement skills of older students, whilst demonstrating simple science experiments for younger pupils, some of whom may never have seen a science experiment before. Older pupils could run experiments or practical demonstrations for younger students or even visit local primary schools and stage some demonstrations there.

Our Gopher Science Lab activities offer a number of activities that are easy for older pupils to demonstrate to a younger audience: www.rsb.org.uk/gopher-science

Our 21st Century BioChallenges Activity Kits also contains a number of activities suited for school pupils of all ages: www.rsb.org.uk/activity-kits

All of the experiments are easy to use and easy to resource as most of the equipment can be found around the classroom, home or local supermarket.

BioArtAttack competition

This is a chance to get thinking creatively about the biology! This can be done as a class, in groups, by individuals or even by the whole school. The aim is to make something creative that capures a theme in biology; be it a collage, model, sculpture or even digital drawings or animations.

Take photos of your pupils' creations and either email them to us at intern@rsb.org.uk or tweet it to the RSB twitter account (handle @RoyalSocBio) with the hashtag #BioArtAttack so it can be entered into our competition.

Prizes will be awarded for the best pieces, as judged by our panel during the week!

Play or theatre production

Running a biology themed play or theatre production can be a powerful and effective way of not only teaching students about science, but delivering a story to other children or family members and other adults who will come to watch.

Plays that tell a story from history about scientific discovery are great, and examples include;

- Roslin Franklin, James Watson and Francis Crick and the discovery of DNA
- Alexander Flemming discovering penicillin
- Charles Darwin and his trip to the Galapagos islands
- Gregor Mendel and his pea plants
- Carl Linnaeus and the formalisation of the modern system of naming animals and plants
- Jane Goodall and her research into chimpanzee behaviour

Although the time and effort involved is significant in such a project, it can have a high impact as an event or number of events, gets everyone involved, and also develop skills such as acting, prop making, directing and more.

Pupils can also put together a role play or a freeze scene depicting some of the topics they have studied in class, and present them to other pupils to help convey what they have learned.

Guided walks / visits

Organise a visit to a local area of specific scientific interest. This might be a local nature reserve or protected area, or could be a laboratory or research facility nearby. Pupils can



complete a nature checklist as they spot common organisms in the area, draw or sketch some of the habitats they explore or take part in a quiz to see how many organisms and plants they can correctly identify.

The Natural History Museum has an online database of natural history groups who can lead a guided tour in your local area: www.nhm.ac.uk/take-part/nature-groups-near-you.

Visiting a local zoo, safari park or aquarium

These usually offer discounted prices for large school parties, so it is worth calling them up to see what group tickets are on offer.



Choosing an event venue

Holding your event on school premises is the most straightforward, but going off site can add an extra dimension to your event and allows for more possibilities of what events you can take part in.

Some potential venues for secondary school visits include:

Local universities

The Royal Society of Biology has contacts at a number of universities around the country that may be able to help you get in touch with their life sciences department.

It may be possible to run an event in their rooms or lecture spaces, and also organise a tour of the labs or the rest of the university too whilst you are visiting.

Local science centres or museums

These are often able to provide an event for free or at a discounted rate. The National Coordinating Centre for Public Engagement has advice on their website about working with museums and science centres.

Find your nearest centre online: www.sciencecentres.org.uk/centres

Village halls and community centres

These have the benefit of offering very cheap hire rates and also they serve as a natural hub for the local community. They often have more than enough space and basic facilities available as well.

Find details of your nearest village hall or community centre online: www.hallshire.com

Local parks or communal green space

If the weather permits, take your event outside for a hands-on event exploring nature and biodiversity.

Local primary schools

If your pupils are looking to take part in their own outreach and engagement event with local schoolchildren, arrange for the older pupils to hold it in the classrooms of participants as this may be easier.

Accessibility and Inclusion

To ensure that as many people as possible can get involved in Biology Week, it is important that the events organised are accessible and inclusive.

Arrangements should be made in order to make events accessible so that everyone, regardless of their circumstances, are able to attend and enjoy the event.

It is important to consider the cost of the event, especially when organising external trips, as they can be expensive and this may exclude some pupils.

When planning your event consider the full range of your school's external visiting policy and include attention to:

- physical accessibility of the venue you're holding your event in
- special needs provision and suitability
- catering for those with dietary, faith and allergy requirements, and ensuring ingredients that those may be sensitive to are clearly marked
- external environments that may be overwhelming for children with autism. Contact parents or guardians beforehand so they can advise on suitability and options.

If you are producing resources for your event, also consider:

- Are there accessible learning materials pitched at different educational abilities available?
- If audio-visual materials are used, do they contain subtitles or is there a transcript available?
- Is the font easy to read? Sans serif fonts are easier for people with dyslexia to read, and a minimum of 12 point font should be used if you are producing literature around your event.

Representation is also important, so also ensure that:

- you consider protected characteristics such as age, race, religion, gender, sexual orientation and ability when considering external speakers
- in imagery used, ensure that the diversity of the community is represented



Publicising your event

We hope to have as many people as possible involved in Biology Week, and we are able to help advertise your events where possible.

You can let us know if you are running an event by completing a form online on our calendar page: www.rsb.org.uk/2017calendar

We will then advertise your event through our own channels, including:

- Online Biology Week events calendar: www.rsb.org.uk/2017calendar
- Monthly e-newsletters which go out to our members and member organisations
- Social media platforms using the hashtag #BiologyWeek where appropriate
- On our website or news pages

You can download a digital media pack from our website, which includes:

- High resolution files of the Biology Week logo
- Sample posters to display at your organisation / event

A press and communications pack can also be downloaded from our website, which includes:

- Sample press releases
- Sample press invites
- Sample social media posts (e.g. for Facebook, Twitter, etc.)

Find social media and communications advice online: www.rsb.org.uk/biology-week-comms Find logo and branding material online: www.rsb.org.uk/biology-week-branding



Contact us

You can find more resources on how to run events in Biology Week on our website:

More about Biology Week Our 2017 Events Calendar Guidance on how to run a Biology Week event Biology Week logos and branding Press and communications help www.rsb.org.uk/biologyweek www.rsb.org.uk/2017calendar www.rsb.org.uk/organise-an-event www.rsb.org.uk/biology-week-branding www.rsb.org.uk/biology-week-comms

You can also contact the RSB on our social media channels if you need help promoting or sharing your content:

Twitter Instagram Facebook Flickr @RoyalSocBio
@RoyalSocBio
facebook.com/RoyalSocBio
flickr.com/RoyalSocBio

For further information on Biology Week or advice on running an event please contact:

Philippa Skett AMRSB

Press & Communications Manager Philippa.skett@rsb.org.uk 020 7685 2561 077 9122 1512



Charles Darwin House, 12 Roger Street, London WC1N 2JU Tel: +44 (0)20 7685 2400 info@rsb.org.uk www.rsb.org.uk

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