

Biology Week

Biology Week event guide for
secondary schools



Outreach and engagement grant scheme

Grants up to £500 available for activities and events in Biology Week 2019. Apply now!



Deadline to apply: 29 April 2019
www.rsb.org.uk/outreach-grants

Table of contents

Introduction to Biology Week	4
What is Biology Week?	4
Why take part in Biology Week?	4
Previous biology week events	5
What's on this year?	5
Different event ideas	6
Biology Quiz	6
Talks and debates	6
Hands-on activities and demonstrations	7
BioArtAttack competition	8
Play or theatre production	8
Get drawing and sketching	9
Guided walks / visits	9
Visiting a local zoo, safari park or aquarium	9
Developing your own hands-on activity	10
Choosing an event venue	12
Local universities	12
Local science centres or museums	12
Village halls and community centres	12
Local parks or communal green space	12
Local primary schools	12
Funding your event	13
RSB Outreach and Engagement grant scheme	13
Public engagement grants and bursaries	13
Sponsorship	13
Accessibility and Inclusion	14
Important caveats to consider when planning an event	14
Resource production	14
Visibility and representation	14
Publicising your event	15
Adding your event to the Biology Week calendar	15
Contacting local press	15
Press invites	15
Press releases	15
Taking photos at your event	16
Photography and filming of those under the 18	16
Social media channels	17
Video recording	17
Advertising your event through RSB channels	17
Contact your local branch	19
Contact us	20

Introduction to Biology Week

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 year’s Biology Week.

What is 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.

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.

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/biologyweekcalendar

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.



Previous biology week events

Around 100 events and activities take place during the week. In the past 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
- BioArt Attack competitions
- BioBakes competitions
- Workshops on food security and recycling
- Trips to museums, wildlife reserves and zoos

What’s on this year?

This year’s Biology Week calendar can be found on our website: www.rsb.org.uk

If you are running an event, let us know as soon as possible so we can share it with others on our Biology Week calendar! Fill in our form with the event details online:

www.rsb.org.uk/biologyweekcalendar



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 captures a theme in biology; be it a collage, model, sculpture or even digital drawings or animations.

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

Prizes will be awarded for the best pieces, as judged by our panel during the week! Find out more about how to submit your entries for this year's competition: www.rsb.org.uk/bioartattack

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:

- 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.

Get drawing and sketching

The Nancy Rothwell Award celebrates specimen drawing in schools and highlights the benefits of combining art and science. There are three age categories (7-11, 12-14, and 15-18), and winners receive drawing supplies and are invited to an experience day at the Royal Veterinary College: www.rsb.org.uk/nancy-rothwell-award

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.

Developing your own hands-on activity

If you want to create a custom activity to do as part of an outreach and engagement event, it is important to decide on the following first:

- The biosciences topic you wish to base your activity on
- Who your target audience is
- What is the scientific literacy of your target audience
- The budget you have to develop an activity

Any bioscience topic is suitable for an outreach and engagement activity, although those that are relevant and easy to show how they affect the everyday lives of an audience may work better than topics that are more abstract.

When you have clear answers to the above, you can then move onto developing the activity. It is best to think of an activity that does the following:

- Requires engagement with the audience member
- Is a process with a clear beginning, middle, and end
- Accurately reflects the principles of the topic you wish to convey
- Is suitable to replicate a large number of times in a short space of time
- Can engage as many people at one time as possible
- Requires minimal resetting after someone has engaged in the activity
- Is possible to set up and transport within the limits of the volunteers you have on hand and the event you are attending
- Is possible to execute within your budget
- Can be executed without specific training for volunteers if possible
- Has minimum wastage or uses minimum amounts of single-use materials, especially if they are not recyclable

When you have your activity idea, a test-run of how it will work is also useful. Invest in a small amount of the materials you will need and get yourselves, friends and family to give the activity a go.

Once you are happy with the practicalities of your activity, put together a brief to accompany the activity that covers the following:

- A clear list of instructions on how the activity works
- The materials needed and how to use them
- The science behind the activity, with clear references to reputable sources
- Common pitfalls and how to fix or avoid them
- Common questions audience members may have and how to answer them

- A risk assessment for the activity and also the event if the location is not a controlled environment
- How to tailor explanations for different audience ages or levels of scientific literacy if appropriate
- How to pack up and store the activity correctly for future use

Once you have tested your activity a couple of times with different audiences, you can refine the brief above and improve the delivery of the activity with feedback from audience members and those running the activity.

For more activity ideas, the RSB has made a number of activities and their briefs available on the website: www.rsb.org.uk/activity-kits



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.

Funding your event

There are a number of ways to ensure you can afford to run your event, with many grants and schemes available that offer financial support.

RSB Outreach and Engagement grant scheme

The RSB Outreach and Engagement grant scheme is available to any member that wishes to run a Biology Week event. Grants are available up to £500, and the grants go towards a large range of activities and events.

You can apply for funding for your Biology Week event or activity from January onwards:

www.rsb.org.uk/outreach-grants

Public engagement grants and bursaries

There are other public engagement grant schemes ran by organisations including the RSB. Some grants have annual deadlines, whilst others offer money on a rolling basis.

A list of public engagement grants on offer is regularly updated online:

www.rsb.org.uk/public-engagement-grants

Sponsorship

Some businesses and companies are often willing to sponsor an event. Depending on their size and budgets they may be willing to cover some of the costs, help with resources, or both, potentially in return for often logos on communications, banners or more.

When obtaining sponsorship, consider:

- What sort of sponsors you would like to be associated with and if there is criteria that would make a sponsor an inappropriate choice
- Whether you will offer exclusive sponsorship; some sponsors may prefer and will provide more funds for an exclusive partnership but bear in mind if this is appropriate
- What you can provide in return for sponsorship, such as logos or artwork on banners, posters, email footers, a speaker slot etc

Consider putting a sponsorship package together, detailing different levels of funding companies could offer you in return for different benefits. Offering packages means a company can then clearly what they'll receive in return for their sponsorship.

if you are able to secure sponsorship, draw up a contract that details the exact agreement, to ensure there are no misaligned expectations on either side.

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.

Important caveats to consider when planning an event

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.

Resource production

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.

Visibility and representation

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.

Adding your event to the Biology Week calendar

You can let us know if you are running an event by completing a form online on our calendar page www.rsb.org.uk/2018calendar

Contacting local press

Getting local news interested in your event is a great way of ensuring more people find out about your event and documenting it for others to read and enjoy.

Before issuing a press invite or press release, do get in touch with the RSB press and communications manager (contact details at the end of this publication) for more advice, guidance, and final sign off.

Press invites

If you're running an event that you think press will be interested in attending on the day, consider drafting a press invite to send to local newspapers, radio stations and television channels ahead of time.

A press invite outlines what the event is and also what coverage opportunities are available. Make sure to include:

- when and where the event is
- any notable attendees or speakers
- any notable content attendees or speakers may say
- what photography and filming opportunities are available (depending on permissions)
- how to get in contact with the organisers if they want to attend

Press releases

If you don't get any interest from journalists wanting to attend on the day, don't worry, you can always issue a press release following the event with media suitable for outlets to use.

This is very similar to a press invite, but make sure to include:

- Photos from the event with clear indication of whom credit should be given to
- A Dropbox or WeTransfer link for video content that you may have shot or have available
- Mention that high res versions are available on request

Check out www.media.info for newsdesk emails and other regional press contacts.

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.)

Taking photos at your event

Schools will often already have a photography policy for pupils, so consult that before your event. If your event is to be attended by other pupils, do ensure you have consent of those in attendance to take their photos and publish them.

When taking photos in public spaces, you do not need to obtain permission of those present to take the photos. Also, as the person taking the photo, you are the copyright holder, so can do with the photo what you please, such as share on social media.

If you are running your event in a publicly accessible space, it is advised you put up signs informing those taking part in your event or activity may be photographed, and that they should flag with someone involved with the event if they are not comfortable with this.

Photography and filming of those under the 18

A child does not have the legal capacity to consent to being filmed or photographed and a parent or guardian must therefore do so on their behalf.

Schools, leisure centres and places where children and adults gather usually have their own photography restrictions so contact the venue to find out whether photography is allowed. You should obtain permission from the venue or event host if you can take photos, and adhere to the policies they have in place for taking photos of those visiting,

If you are running your own event, you should ask guests to explicitly opt in to having their photo taken or being filmed, either as they sign up for the event, as they arrive, or immediately before their photo is taken.

This should list what the photo may be used for, how it will be kept secure when stored and how people can contact you if they wish for their photo to be deleted.

We can draft you a consent form for adults to sign if you wish to take a photo of their child. We can also help develop photography consent forms that attendees can agree to as they sign up to an event.

For more information on taking photos of children, consult the NSPCC website:

www.nspcc.org.uk

Social media channels

You can use social media tools not only to capture the action on the day, but also to allow for those attending and those who can't to interact with the event too.

Making content to advertise your event and sharing it online is also a great way to reach a wider audience. Make sure to check out our logo and branding page on our website for guidance on how to use the Biology Week logo: www.rsb.org.uk/biology-week-branding

- Twitter is a great way to advertise your event, and also document the event as it develops. If you are running a debate or lecture, you can use twitter to take questions from those in the audience or those following at home. Make sure to use the hashtag #BiologyWeek in all of your posts.
- Facebook is also a great way to advertise your event. You can contact admins of pages who provide news and updates suitable for your audience and they can plug your event, or you can share your event among friends and contacts more directly.
- Instagram is great if you have some amazing photos from your event, and you can also provide updates from the event as it unfolds using the Instagram stories feature. Again be sure to use the #BiologyWeek hashtag.

Video recording

Producing video content is great; video content typically performs better on social media channels and is a great way to capture more dynamically the event itself. You can either live-stream your event from a mobile device onto Facebook and Twitter, or record, edit and release footage at a later date.

Live-streaming is a great way of increasing accessibility to your event and bringing it to a wider audience. It is particularly suitable for lectures or debates, where you don't need multiple camera shots to capture the event in its entirety. Two of the easiest ways to stream an event is via periscope on Twitter, or as a Facebook live video.

If you have suitable footage from your event we can upload and share via the RSB YouTube channel.

Advertising your event through RSB channels

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

- The online Biology Week events calendar
- Monthly e-newsletters which go out to our members and member organisations
- Social media platforms where possible
- On our website news pages and blog



Contact your local branch

You should contact your local RSB branch who can help you run your event and make sure they're aware of the work you are doing.

They are a great source of support and can let you know about any grants that are available to help towards the cost of your event.

They also have a lot of resources already available online to help with event planning, publicising and running, and can also put you in touch with others in the area who are interested in biology and may want to get involved too.

Get in contact with your local branch via email:

Beds, Essex and Herts	bedsessexherts@rsb.org.uk
Devon and Cornwall	devoncornwall@rsb.org.uk
East Anglia	eastanglia@rsb.org.uk
East Midlands	eastmidlands@rsb.org.uk
Kent, Surrey and Sussex	kentsurreysussex@rsb.org.uk
London	london@rsb.org.uk
North Western	northwest@rsb.org.uk
Northern	northern@rsb.org.uk
Thames Valley	thamesvalley@rsb.org.uk
Wessex	wessex@rsb.org.uk
West Midlands	westmidlands@rsb.org.uk
Western	western@rsb.org.uk
Yorkshire	yorkshire@rsb.org.uk
Scotland	scotland@rsb.org.uk
North Wales	northwales@rsb.org.uk
South Wales	northwales@rsb.org.uk
Northern Ireland	ni@rsb.org.uk
Australasia	australasia@rsb.org.uk
Hong Kong	hongkong@rsb.org.uk

Check out regional branch resources online: www.rsb.org.uk/regional-resources
Find out what events are already happening near you: www.rsb.org.uk/regional-events
Find out more about our branches: www.rsb.org.uk/regional-activity

Many of the RSB branches also have their own social media channels. You can find their facebook pages by searching on Facebook using the branch name, and a list of branch twitter accounts can be found here: twitter.com/RoyalSocBio/lists/rsb-regional-branches

Contact us

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

More about Biology Week

www.rsb.org.uk/biologyweek

Our events calendar

www.rsb.org.uk/biologyweekcalendar

Guidance on how to run an event

www.rsb.org.uk/organise-an-event

Biology Week logos and branding

www.rsb.org.uk/biology-week-branding

Press and communications help

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

@RoyalSocBio

Instagram

@RoyalSocBio

Facebook

facebook.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

We can offer advice and guidance from our public engagement team via email, over the phone, or in person if you are in London.

Outreach and engagement awards

Recognising those who are outstanding
in enthusing and engaging the public

Prizes up to £1,500 available for new and
established researchers



Closing date for nominations:
28 June 2019

rsb.org.uk/outreach-awards

Notes

This image shows a full page of blank, lined paper. It features approximately 28 horizontal blue lines spaced evenly across the page, typical of standard notebook paper. The lines are thin and light blue, set against a plain white background. There are no margins, text, or other markings on the page.

Notes

This image shows a full page of blank, lined paper. It features approximately 28 horizontal blue lines spaced evenly across the page, typical of standard notebook paper. The lines are thin and light blue, set against a plain white background. There are no margins, text, or other markings on the page.



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



@RoyalSocBio



@RoyalSocBio



/RoyalSocBio



/RoyalSocBio

Registered Charity No.277981 Incorporated by Royal Charter