

Biology Week

**Biology Week events guide for
primary 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

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Introduction to Biology Week

This pack has been produced to help primary school teachers who are looking for ways for their class or school to be involved in this year's Biology Week celebrations.

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 the Royal Society of Biology website: www.rsb.org.uk/biologyweekcalendar

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



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.

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.

Talks and debates can take place in a classroom, during an assembly or as part of a debate club meeting if your school has one.

A visit to a local lab at a secondary school or university

Some universities will already have outreach schemes in place in which schools can take part, so check ahead with your local institutions. Visits to labs, along with discussions with some of the researchers there about what they do, will allow primary school pupils to see science in action.



Themed show-and-tell

Hold a nature-themed show and tell; ask pupils to bring in some interesting specimens for them to talk about, perhaps from their garden, the playground, or on the way to school. Make sure you remind younger children never to pick up anything they cannot clearly identify as safe to bring, and ensure they are supervised by parents or guardians whilst collecting material.

Hands-on activities and demonstrations

Running a practical demonstration is great for pupils, especially those in, or about to move to secondary school. This is something you could arrange with local secondary schools who could use our Gopher Science Lab activities and put on demonstrations for younger pupils: 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, including those under 12: 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 your 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! 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 pupils 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:

- Alexander Flemming discovering penicillin
- Charles Darwin and his trip to the Galapagos islands
- Gregor Mendel and his pea plants
- Jane Goodall and her research into chimpanzee behaviour
- Mary Anning and her fossil collecting

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, singing 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 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.

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

Visiting a local zoo, safari park or aquarium

These institutions 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 if possible can add an extra dimension to your event and gives more options for the types of events you can plan.

Some potential venues for primary school visits include:

Local universities

The Royal Society of Biology has contacts at a number of universities around the country who 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 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 more cost-effective hire rates and also serve as a natural hub for the local community. They often have more than enough space and basic facilities available

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.

Secondary schools / sixth form colleges

Local secondary schools or six form colleges often have suitable facilities for events and are worth approaching to hire a space for an evening or weekend event.

They also may have laboratory facilities suitable for a visit, and it may be that the older students are happy to help the younger pupils with biology demonstrations.

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.

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

Event cost

Be sure to consider the cost of the event as high costs can exclude those who have little disposable income.

Is there a charge for the event? Expensive events can exclude pupils from families with lower incomes. Consider subsidising ticket prices if the cost is quite high, or look to see if you can get discounts for purchasing many tickets all in one go.

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:

www.rsb.org.uk/biologyweekcalendar

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 or filming video

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
Devon and Cornwall
East Anglia
East Midlands
Kent, Surrey and Sussex
London
North Western
Northern
Thames Valley
Wessex
West Midlands
Western
Yorkshire
Scotland
North Wales
South Wales
Northern Ireland
Australasia
Hong Kong

bedsessexherts@rsb.org.uk
devoncornwall@rsb.org.uk
eastanglia@rsb.org.uk
eastmidlands@rsb.org.uk
kentsurreysussex@rsb.org.uk
london@rsb.org.uk
northwest@rsb.org.uk
northern@rsb.org.uk
thamesvalley@rsb.org.uk
wessex@rsb.org.uk
westmidlands@rsb.org.uk
western@rsb.org.uk
yorkshire@rsb.org.uk
scotland@rsb.org.uk
northwales@rsb.org.uk
northwales@rsb.org.uk
ni@rsb.org.uk
australasia@rsb.org.uk
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
The Biology Week 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



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