

Where and when:

Date: Thursday 3 February 2022

Time: 11:00am

Duration: 30 minutes

Location: bbc.co.uk/livelessons

This programme is available to view from home or school, and no sign-up is required.

Simply visit the website on the day and follow the instructions on the page to watch.

Curriculum links: KS2/Second Level Science/The World Around Us for 7-11-year-olds.

- identify how plants are adapted to suit their environment in different ways
- explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
- describe the life process of reproduction in some plants
- interdependence - how living things rely on each other within the natural world

Setup:

This Live Lesson will be broadcast live on the CBBC channel and simultaneously on the BBC Teach website at 11:00am.

We will be running a live commentary page on BBC Teach during the live broadcast to reflect contributions from children watching from home and school.

How much space and equipment is needed?

The lesson can be viewed in a classroom or at home with a device (computer, tablet or mobile phone) linked to a reliable broadband connection or watched on a television on the CBBC channel. We will be asking children to get involved in activities throughout the lesson and have provided downloadable [activity sheets](#) to help guide them through this.

You may wish to hand these out in advance, along with stationery such as pens and pencils. Pupils will still be able to follow the activities if they don't have printed activity sheets to hand.

Lesson content

This programme covers learning objectives across:

- Key Stage 2 Science (Plants) on the national curriculum for England;
- 2nd Level Sciences (Planet Earth - biodiversity and interdependence) on Scotland's curriculum for excellence;
- Progression Step 2 in Science and Technology (the world around us is full of living things which depend on each other for survival) on the curriculum for Wales.
- Key Stage 2 The World around us (Interdependence) on the Northern Ireland curriculum.

This is the second of our [The Regenerators](#) Live Lessons created in collaboration with BBC One series [The Green Planet](#). You can see the first of these [here](#). Each programme will also work as a stand-alone lesson.

Section 1 – Introduction

The programme will start with a short movie-style trailer featuring the Svalbard Global Seed Vault in Norway where seeds are stored for future generations. The presenters will point out that without seeds there would be no plants. They will then ask the audience to think of as many ways as possible that humans rely on plants.

Teachers will be encouraged to email pictures and comments about their pupils' favourite plants to live.lessons@bbc.co.uk or tweet us using the hashtag #bbclivelessons.

If you're sharing pictures or videos of children, please remember to confirm that you are the teacher or parent of the children featured and that you have parental or guardian consent.

Section 2 - Adaptations and activity 1

The presenters will explain that how different plants have adapted over time to survive in different environments.

The presenters will then play a game to work out how a cactus and a water lettuce have adapted to their environments, with the answers revealed in film extracts from The Green Planet.

Then for the first activity, presenters will then challenge the audience to see how much they can remember by giving them 45 seconds to match the correct adaptations to a cactus plant.

Download activity sheet 1 [here](#).

Section 3 – Plant reproduction and activity 2

Next, we will play a short film presented by Blue Peter's 'Skinny Jean Gardener' Lee Connelly to explain where seeds come from and how plants reproduce.

He will talk through the structure of a hellebore winter flowering plant, pointing out the stamen, anther and carpel - which is made up the stigma, style and ovary.

The presenter will then outline the process of pollination, explaining that pollen is a fine powder that's needed make new plants. Bees are great pollinators along with butterflies, flies, insects, wasps and even birds.

The audience will then be introduced to activity 2.

They will be given 45 seconds to match the labels to the reproductive parts of the flower, reinforcing the learning in the video. You may wish to consolidate vocabulary for this topic using supporting BBC Teach material:

<https://www.bbc.co.uk/teach/class-clips-video/science-ks1-ks2-ivys-plant-workshop-the-anatomy-of-the-flower/zjmhkmn>

Download activity sheet 2 [here](#).

Section 4 – Seed dispersal and activity 3

In this section of the programme we will move on seed dispersal.

The presenters will introduce film extracts from The Green Planet series to illustrate some of the ways plants disperse their seeds in the wild. These include by animal, wind, water and explosion.

The film extracts will include close-up footage of seeds exploding from pods, dung beetles burying seeds, and film of bulrush seeds being dispersed on the wind.

The presenters will also mention some seeds are carried by water, while others simply fall to ground due to gravity.

For more on this topic, you may find this short Bitesize film about seed dispersal useful: <https://www.bbc.co.uk/bitesize/topics/zxfrwmn/articles/z28dpbk>

For activity 3, pupils will be given 45 seconds to match three plants to the type of seed dispersal they use.

Download activity sheet 3 [here](#).

Section 5 – your pupils' favourite plants

The programme will finish with a look at pictures and messages which have been sent in about children's favourite plants.

You can email your pupils' drawings and comments to us at live.lessons@bbc.co.uk and we'll feature as many as we can in our live programme and on our live online commentary page.

Visit [The Regenerators website](https://www.bbc.com/teach/the-regenerators) for more resources and catch up with all The Green Planet programmes so far on iPlayer.

Contact us:

If your children or pupils are planning on watching the Live Lesson in school or at home, let us know. Email us before and during the programme with your school name or the names of your children to live.lessons@bbc.co.uk or get in touch using the hashtag **#bbclivelessons** and they could be featured on our live commentary page.

If you are sending in any images or videos that feature children, please ensure that you have parental or guardian permission, as they may be shown on our website. Please be aware that the BBC may ask you to demonstrate that you have received verifiable parental consent. In the email, please confirm your official relationship to the child/children featured, e.g. teacher, Brownie group leader, sports coach etc. and confirm that you have sought prior parental consent. Please also ensure the material is not sensitive or controversial. Read our terms and conditions at [bbc.co.uk/usingthebbc](https://www.bbc.co.uk/usingthebbc) for more information.