Bitesize: The Regenerators – The Green Planet Live Lesson 1 Teacher and parent/carer guide



Where and when:

Date: Wednesday, 12 January 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 and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- Explore the part that flowers play in the life cycle of flowering plants, including pollination.
- 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 (hyperlink) to help guide them through this. You may wish to hand these out in advance to your class, 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;
- 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;
- 2nd Level Sciences (Planet Earth biodiversity and interdependence) on Scotland's Curriculum for Excellence and;
- Key Stage 2 The World Around Us (Interdependence) on the Northern Ireland Curriculum.

Section 1: Introduction and The Green Planet

The presenters will explain that in this Live Lesson we will be exploring different parts of a plant and what plants need to survive. We will show a short film extract from the new BBC One series The Green Planet, presented by Sir David Attenborough. Our 'tropical' theme ties in with the first episode of The Green Planet, which is due to air in January and will be available on BBC iPlayer.

As a quick exercise children will be given 15 seconds to name as many plants as they can, including those they see around them or eat.

Teachers will be encouraged to email pictures and comments about what their class has been learning about plants and our green planet to live.lessons@bbc.co.uk or tweet using the hashtag #bbclivelessons.

We'll publish as many as we can on our Live Commentary page. 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: Activity 1- Label these plants

One of the presenters will be dressed up as a flowering plant and children will be asked to help label different parts of the costume:

flower - attracts pollinators like butterflies and bees **leaf** - turns sunlight into food in a process called photosynthesis **stem** - supports leaves, carries water, nutrients and helps the plant stand upright **roots** - absorb or take up water and nutrients from the soil and anchor the plant

The other presenter will be dressed as a tree, and we will talk through the labels of roots, tree truck, branches, bark, leaves on this costume.

In Activity 1, children will then be shown different parts of a plant and asked to label as many parts as they can in 60 seconds. The activity sheet can be downloaded here.

Section 3 - What plants need to grow

The presenters will explain that most plants need five things to grow - light, air, water, nutrients and space. We will then play a short film extract from The Green Planet to illustrate that in tropical rainforests there are so many trees, the plants on the floor struggle to get sunlight and so are adapted for these conditions.

We will then talk to a member of The Green Planet production team to find out what it was like filming for the series.

Section 4: Activity 2: Label this leafcutter ant

In this section we will find out more about leafcutter ants - tiny creatures that live in the rainforest and rely on plants. We will show a video about leafcutter ants filmed at Chester Zoo, before introducing Activity 2.

Children will be given 60 seconds to see if they can label the following parts of the ant: thorax, head, abdomen, legs, antennae, mandibles. The activity sheet can be downloaded here.

The term 'mandibles' will be explained in the video, but you may wish to recap the other body parts labelled as a follow up to the programme.

Section 5: Activity 3: Design a plant that would be irresistible to you, if you were an insect.

In this final section, we take a look at some of the clever ways plants attract pollinating insects through the way they look and smell. The presenter will explain the term 'mimicry' here.

For Activity 3 children will be given 60 seconds to design and label a plant that they would find irresistible if they were an insect. The activity sheet contains a <u>template</u> to draw on, or children could talk about their ideas with the person next to them.

Just before the end of the programme we will show some pictures of children's designs for new animals that would survive in the rainforest.

This may be a project you would like to do with your pupils ahead of the Live Lesson.

Email us pictures of your pupils' creations to <u>live.lessons@bbc.co.uk</u> and we will publish as many as we can on our live commentary feed on the day.

The programme will finish with a reminder that there are more resources on <u>The</u> Regenerators website.

Contact us:

If your child or pupils are planning on watching the Live Lesson in school or at home, let us know. Email us with your school name or 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 for more information.