A Plant’s Life

Key Stage Stage 2
1 hour 45 mins

How do plants live in some of the most extreme places on the planet? Pupils will see how plants are adapted to different habitats. The session will explore how insectivorous plants catch their own food, how plants in the desert survive with little rainfall and how plants in the rainforest reach up to the sun and put up with wet, steamy conditions. Pupils will also have a chance to explore the Garden outside, looking for temperate adaptations and the oldest tree in the Garden.

Learning outcomes

During this session pupils will:
• Find out what plants need to survive
• Explore the diversity of the plant world
• Discover how plants maximise their chances of survival under different environmental conditions
• Focus on the adaptations of rainforest, desert and insectivorous plants

National Curriculum subject areas

Key Stage 2:
Science Year 3: parts of flowering plants, requirements of plants for life and growth
Science Year 4: plants in the environment
Geography: climate zones, biomes, vegetation belts

Pre-visit activities

Classroom discussion
• What is a Botanic Garden? What kind of plants and trees grow here? Where did they come from originally? What else might you see on a visit to the Botanic Garden?
• Take a look at our website to find out more:
http://www.botanic-garden.ox.ac.uk

Healthy plants
• Make a model of a plant to display on your classroom wall. Ask pupils to draw pictures of all the things a plant needs in order to be healthy and grow, and add them to the model. Make labels showing what each part of the plant is, and what job it does for the plant.
Take a look outside

- Do the plants in your school grounds get all the things they need to help them grow? At what time of year do they do most of their growing? Can you identify some of the plants you find? Use a field guide to help you, such as this one: http://www.field-studies-council.org/publications/pubs/playing-field-plants.aspx

Who needs plants?

- Think about how many plants there are in the world. Are there any places in the world where plants do not grow? Who needs plants to survive? Make a list of the people and creatures you know that use or need plants in order to live, and include the plants they use and what they use them for.

Post visit activities

Wish you were here...

- Present an assembly to the rest of your school and tell them about the surprising things you saw in the Garden. What did the different glasshouses feel like when you walked inside? What did the plants look like in the different habitats? What was your favourite plant? Remember to tell the whole school how plants are adapted to grow in all sorts of different places.

Around the world

- Draw an outline of the world on your classroom wall and create a large collage of the different habitats. Use pictures, photos, drawings and paintings of the plants found in the different countries to “fill in” the Earth’s land surface.

Help your school habitat

- Improve the habitat of your school grounds: let some grassed areas grow long, make a log pile for insects, make room for a compost heap. You can find more ideas for how you can encourage nature into your grounds here: http://www.cornwallwildlifetrust.org.uk/fox_club/education/school_grounds_activities

Resources

- Find out more about different biomes of the World at Missouri Botanical Garden: http://www.mbgnet.net/index.html
- The Rainforest Alliance’s website has lots of information and lesson plans about rainforests: http://www.rainforest-alliance.org/curriculum
- Take a look at plant adaptations and survival in the desert habitats of the USA: http://www.desertusa.com/du_plantsurv.html

If you have any comments or feedback on these activities, or need any further information, please contact Kate Castleden or Emma Williams, Education Officers,