

WORKSHOP SUMMARY

Packaging Patrol

What can nature teach us about waste and recycling? The task is to explore the relationships between plants, people and packaging. Can your class complete Eden's waste challenge and join the Packaging Patrol?

How Long? Two Hours

Who? Year 4, 5, 6. Science (Green Plants) and Sustainability

Where? Core classroom and Rainforest Biome

Students will:

- Consider key issues in waste and recycling and understand that their choices can make a difference.
- Understand the importance of seeds, fruit and seed dispersal in a plant life cycle.
- Learn key vocabulary - reduce, reuse, recycle, biodegradable, seed, fruit, seed dispersal

Curriculum Links

KS 2 Geography
2b, 5a, 5b, 6e

KS 2 science
2.3d

KS 2 Design and Technology
3c, 4a

KS 2 Citizenship
1a, 2a, 2j, 5d, 5e

What happens?

Children are met by the Packaging Patroller who sets them their challenge; to complete their training and become members of the Packaging Patrol themselves. Working in teams, they set about sorting some rubbish and play a game to discover the hierarchy of waste - reduce, reuse, recycle. They compare our packaging waste with the packaging that plants use to protect their seeds and talk about the importance of seeds and fruit in a plant's life cycle.

On their journey through the Rainforest Biome pupils observe carefully to collect and record examples and pictures of fruit and seeds.

Back in the classroom the teams look at examples of seeds and consider methods and the importance of seed dispersal. Finally we bring it back round to people and figure out what nature can teach us about how we should deal with our waste. Before they're invited to join the Packaging Patrol and receive their certificate, pupils make a Packaging Promise to take action to reduce their own waste.

Practicalities



Please ensure your group is divided into workshop teams, each with an adult helper. Our Education Team will lead your workshop session, but the participation of your staff is essential to the success of our programmes. We provide all the equipment for the workshop.

Our programmes are focussed learning experiences, they do not provide a general introduction to Eden Project, so please allow sufficient unstructured exploration time for your students during your day.

Additional information is on our website
www.edenproject.com

Ideas to support your visit

Before you come

- It would be really useful to review vocabulary and learning linked to the life cycle of green plants.
- Spend some time monitoring what your class throws away over a week. At the end of the week review what has been thrown away and consider what could have been done to reduce the amount.
- Thinking about Wants and Needs can be a really useful way into considering our consumption habits. It also has lots of citizenship links. UNICEF have some great material free to download at www.unicef.org.uk/tz/resources/resource_item.asp?id=35

Follow up activities

Waste and consumption

- Give groups of children four things to bury in their playground (or in a plastic washing bowl or bucket) e.g. plastic bag, apple, corn based plant pot, orange peel etc. Dig them up in 2 months. Ask pupils to predict which things will have decomposed. Make sure you do your risk assessment for this one!
- Give out a selection of common everyday waste items with pegs and ask pupils to peg the items out onto a washing line in order of speed of decomposition. Some extra research may be required.
- Take a trip to your local waste recycling centre to find out what is being done to reduce the amount of material going to land fill in your area.
- Use the internet to research students' favourite food companies and find out what their policy is regarding their packaging. Is it made of recycled materials? Is the packaging itself easily recyclable? How could they improve their packaging to make it more environmentally friendly?

Seed dispersal

You could have a competition to disperse seeds (or something else small like a paperclip) as far as possible. Try paper helicopters <http://home.howstuffworks.com/paper-helicopters.htm> or students could make catapults (risk assessment required!)

Or have a look at dandelion seeds and then try making your own parachutes – whose stays in the air the longest? www.thinkingfountain.org/p/paperclip/paperclip.html. There are lots of opportunities for maths and measurement with this activity. Perhaps students could investigate the relationship between the size of the parachute and the time taken to fall to the ground. Students could use the data collected to plot appropriate graphs to represent the relationship.

Useful resources

- Our friends at EDF have created the Pod www.jointhepod.org containing a range of practical activities, designed to help schools lower their carbon footprint and cut down on energy and water usage – there's some useful background information on waste and other topics too.
- Composting teaches children about waste, recycling and gives you a great product to use in the school garden. Try www.littlerotters.org.uk to get you started.
- Wastewatch is a UK based charity who produce materials and run programmes to support learning about waste, consumption and recycling www.wastewatch.org.uk
- The seed dispersal section from Sir David Attenborough's 'Secret Life of Plants' is available on youtube www.youtube.com/watch?v=zbQ1jWl3AOM.
- To celebrate 200 years since Charles Darwin's birth, The Great Plant Hunt has been developed by the Royal Botanic Gardens, Kew. The teachers' pack includes some useful resources and activity ideas related to seeds and seed dispersal www.greatplanthunt.org