



The Ecological Footprint

A TWINS PROJECT PLAN

General Overview...

This TWINS project aims to raise awareness about how we can reduce our impact on the environment. Firstly, students will recognise how they personally impact on the global environmental. This project will show them how to minimise their impact - starting today - and how to make the right product choices in the future.

An Ecological Footprint is a measure of the impact human activities have on the environment. The average Ecological Footprint per person in a developed country is 7.6 Global Hectares, but worldwide, only 1.8 biologically productive global hectares exist per person.

Through measuring their own footprint students can learn the area of land needed to provide the necessary resources and absorb the waste generated by them. Through this, they can realise how their lifestyle impacts on their planet is and how they can reduce this impact through simple steps. Through this project students think globally to understand how we all share this planet and how changes affect all of us. Students can analyse how their actions can impact on other countries and communities.

Key areas covered...

This project can span across many different school subjects as well as providing the students with the opportunity to explore various global dimension themes:

- Sustainable development
- Environmental hazards
- Geography and natural processes
- Public health
- Biology (flora and fauna)

Method...

- The TWINS Coordinators of both schools agree to share this project and set a deadline for its completion
- The teachers agree on how the project will be presented
- Students work as a class or in small groups to research the project.
- Once the relevant information has been collected by students (using the Internet, Library, questioning local authorities, visiting supermarkets, consulting local waste management organisations etc.) the project will be prepared to be exchanged with the TWIN school overseas
- After the projects are exchanged, a class is held to analyse and discuss the findings – focusing on the suggestions on how to improve the current situation.

The Final Product

On completion, this project can include:

- Illustrations, photos or magazine cut outs
- Findings and photographs from a field trip/visit
- Information about the measure of the ecological footprint of the students and their communities, suggestions for a positive change of the current situation, the significance of the climate change, etc.

Critical Thinking

Student's critical reflection could include:

- What does the term ecological footprint mean?
- What are primary footprints? What are secondary footprints?
- What are our energy sources? What is renewable energy?
- Why should we use renewable energy?
- How does car sharing help to protect the planet? Why should we use public transport as primary mode of transport rather than private cars?
- Why is using the airplane so bad for the environment?
- What modern methods do we have to reduce the bad impact that cars have? Are they in use in all countries? How do the rules and regulations vary between Sri Lanka and other countries?
- How do the importing/exporting of goods impact on the environment? Are there options that are more environmental friendly than others?
- How can we influence the negative impact on our environment as a consumer buying goods? Which goods should we avoid?
- How does bottled water influence our environment? How harmful is the production/recycling of the bottle? Is it necessary to buy bottled water in your country? (eg. is the tap water safe to drink?) What are other alternatives?
- How does eating meat influence our environment? Do vegetarians live an environmentally friendlier life?
- Where are our clothes produced? Does this have an impact on the environment? Could we improve the positive impact on the environment by buying clothes that are made out of different material or in different countries? (eg. closer to our home?)
- Why should we avoid high packaged items? How can we avoid them?
- What is global warming? What can we do to reduce its speed?
- What is the "industrial revolution"?
- How can trees help protecting our environment? What happens if there are no trees? How would this affect the wildlife?

Further Resources...

A 5 minute Online Quiz that measures the individual ecological footprint based on diet, waste, housing and transport. Students can quickly learn how their lifestyle compares to others in the world and 'how many planets' would need to exist if everyone lived like them! This is an Australian based test.

<http://www.earthday.net>

This is a comprehensive website containing Urban and Ecological Footprint Calculators, reports, links to other sites and organisations, information on the energy footprint, carbon footprint and water footprint, plus guides and what students can do to reduce their impact on the environment.

<http://www.gdrc.org/uem/footprints/index.html>

A calculator that can assess student's footprint based on carbon, land, water and trees, or all of these combined. This tool also compares their result with the average for various cities around the world.

<http://www.zerofootprinttoronto.org/simulator/Zerofootprint%20Calculator%20Simulator.swf>

This website answers the questions – What is climate change? What is your carbon footprint? – and the role of trees in offsetting your emissions. It covers frequently asked questions and includes a calculator to work out the footprint of students. This site also functions as a donation point where people can donate funds to have trees planted to offset their carbon emissions each year.

<http://w.plant-a-tree-today.org>

The World Wildlife Foundation has a Footprint Calculator. This test takes 5 minutes and considers your home, diet, belongings and transport to determine your footprint. It focuses on the United Kingdom.

<http://footprint.wwf.org.uk/>