

1. Eco-towns

Most people agree that we need to adjust our lives to have less impact on the planet. Eco-towns, which are designed around sustainable living, are one way to do this. Explore what an eco-town is and look at the example of Cloughjordan in Co. Tipperary to find out more about what makes a town an eco-town.

Notes
<p>In advance of this unit, it would be helpful to find any local examples of sustainable buildings or those that have solar panels, green roofs, etc.</p> <p>When examining maps, refer to Skills: Mapwork on p. 50 of the Student Book. When investigating, refer to Skills: Working Scientifically on p. 84 of the Student Book. When carrying out research, refer to Skills: Research on p. 118 of the Student Book.</p>

Curriculum Information	
Geography & Science	
Strand and Strand Unit	Skills
<p>Human environments: People living and working in a contrasting part of Ireland</p> <ul style="list-style-type: none"> learn about and come to appreciate the peoples and communities who live and work in the locality and in a contrasting part of Ireland become aware of the natural features in the locality and in a contrasting part of Ireland and their interrelationship with the lives of people living in these places explore, investigate and come to appreciate the major features of the built environment in the locality and in a contrasting part of Ireland <p>Environmental awareness and care: Environmental awareness</p> <ul style="list-style-type: none"> identify, discuss and appreciate attractive and unattractive elements of natural and human environments explore some examples of the inter-relationship of climate, natural features, flora, fauna and human life in different environments in Ireland and in some of the main climatic regions of the world recognise and investigate aspects of human activities which may have positive or adverse effects on environments become aware of the importance of the Earth's renewable and non-renewable resources foster an appreciation of the ways in which people use Earth's resources come to appreciate the need to conserve Earth's resources 	<p>A sense of place and space</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> A sense of place <input type="checkbox"/> A sense of space <p>Maps, globes and graphical skills</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Using pictures, maps and models <input type="checkbox"/> Maps and globes <p>Geographical investigation skills/Working scientifically</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Questioning <input checked="" type="checkbox"/> Observing <input type="checkbox"/> Predicting <input checked="" type="checkbox"/> Investigating and experimenting <input checked="" type="checkbox"/> Estimating and measuring <input checked="" type="checkbox"/> Analysing <input checked="" type="checkbox"/> Recording and communicating <input type="checkbox"/> Evaluating <input type="checkbox"/> Designing and making

Resources
<ul style="list-style-type: none"> <i>Explorers Geography & Science 5th Class Digital: 1. Eco-towns: Unit Stimulus</i>

- Digital Maps
- *Explorers* Geography & Science 5th Class Student Book: 1. Eco-towns pp. 6–9
- Recording clicker for the water usage ‘Investigate’ skills sticker on p. 8 of the Student Book
- Local examples of sustainable buildings

Useful Links

Read a report which provides useful contextual information on eco-towns:

www.designcouncil.org.uk/sites/default/files/asset/document/what-makes-an-eco-town.pdf

Visit Cloughjordan’s website which has a wealth of information about the village’s history and ethos (click on ‘Our Community’ to find out more about how the village is organised):

www.thevillage.ie/about-us/the-project/

Residents of Cloughjordan share their experiences here:

www.thevillage.ie/our-community/our-members/

Children can make a model of the eco-home they have designed. This lesson plan has some useful tips:

solar-aid.org/wp-content/uploads/2016/06/dt-eco-house-unit.pdf

This website has statistics that will help you estimate your water usage, as well as tips on how to save water:

waterwise.org.uk/save-water/

Watch a video summary of Cloughjordan ‘A November Day at the Eco-village’:

<https://www.youtube.com/watch?v=sn-ZVZY4SHs>

Keywords

natural resource, carbon dioxide (CO₂), eco-town, renewable energy, green spaces, carbon-neutral, solar panels, insulation

Lesson Suggestions

- Use the digital Unit Stimulus to explore a labelled diagram of an eco-town. Something that is eco-friendly is not environmentally harmful. An eco-town is a living environment built to be sustainable (able to be maintained at a certain rate or level). A wind turbine converts wind energy into electricity. Green spaces are good for the environment as they allow plants and animals to thrive.
- Use the Digital Map of Ireland to locate Cloughjordan Eco-village.
- As per the ‘Think About It’ skills sticker on p. 6 of the Student Book. discuss whether existing towns (and your own local community) could be turned into an eco-town, or whether eco-towns must be built from scratch.
- As per the ‘Map It’ skills sticker on p. 7 of the Student Book, find Cloughjordan Eco-village on a map. Do you think it is a good place for an eco-village? Answers might include: Yes, it is surrounded by trees and green areas, there is plenty of space for humans and nature to exist together.
- As per the ‘Investigate’ skills sticker on p. 8 of the Student Book, investigate water usage in your classroom. Discuss ideas for saving water in the classroom, based on your results.
- Ask children to carry out a water usage investigation at home and share their results with the class.
- Use Google Earth to explore an aerial view of Cloughjordan Eco-village. Then, answer the following questions: Is Cloughjordan Eco-village larger or smaller than you expected? What do you notice about

Lesson Suggestions

the land around Cloughjordan Eco-village? What are some positive things about living in an eco-village? What are some negative things about living in an eco-village?

- Visit the Cloughjordan Eco-village website and read about the experiences of some of its residents (see 'Useful Links'). Then, answer the following questions: Who moved to Cloughjordan Eco-village because they 'wanted to build a warm eco-home' with their family? Why did Gemma Brugha move to Cloughjordan Eco-village? Explain why one other person moved to Cloughjordan Eco-village.
- Watch the video 'A November Day at the Eco-village' (see 'Useful Links'). The video gives a good summary of life in Cloughjordan and includes footage highlighting daily life in the village.
- Research an eco-town elsewhere in the world and compare it to Cloughjordan.
- As per the 'Working as a Geographer: Analysing' activity on p. 9 of the Student Book, use the average sunshine map to assess the best locations in Ireland for installing solar panels.
- As per the 'Working as a Scientist: Designing' activity on p. 9 of the Student Book, research and design your own eco-home. If possible, build a model of the home from recycled materials.

Linkage and Integration

History: *Local studies: Homes.*

SPHE: *Myself and the wider world: Developing citizenship.*

Mathematics: Collect and organise data in relation to water usage in the classroom.

Language: *Abair Liom* 5th Class: 5. & 6. Sa bhaile pp. 34–47, *Starlight* 5th Class: 2. Homes and houses pp. 18–29.

Home/Parental Involvement

Children can apply what they have learned to assess how sustainable their own homes are, in terms of energy use, water use, and more. They may choose to carry out an investigation into home water usage or electricity usage, similar to what has been carried out in the classroom.