

Geography & Science 6th Class: 7. Sustainability

Paired Units: Geography & Science: 5. Climate & 6. Climate Breakdown

Following a unit on climate breakdown, explore our dependence on Earth's natural resources, both renewable and non-renewable. Learn what sustainability means and how it applies to our lives. Explore the effects of unsustainable living and investigate what we can do to address the problem.

Notes

Environmental problems such as climate breakdown can be daunting for children. It is important to guide them in understanding and contextualising the facts. Help them to appreciate that these problems are worldwide and action to address them is needed on a global scale. However, that doesn't mean that children cannot do anything to help. Encourage them to be proactive in living sustainably and reinforce the messages of 'the power of one' and 'no one is too small to make a difference'.

For this unit it would be useful to explore examples of sustainability in the local area such as individuals, businesses or local authorities that are taking action to be more sustainable.

Curriculum Information

Geography & Science

Strand and Strand Unit	Skills
<p>Environmental awareness and care: Environmental awareness</p> <ul style="list-style-type: none"> 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 the Earth's resources come to appreciate the need to conserve the Earth's resources <p>Environmental awareness and care: Caring for the environment</p> <ul style="list-style-type: none"> identify and discuss a local, national or global environmental issue come to appreciate individual, community and national responsibility for environmental care 	<p>A sense of place and space</p> <ul style="list-style-type: none"> <input 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 type="checkbox"/> Observing <input type="checkbox"/> Predicting <input checked="" type="checkbox"/> Investigating and experimenting <input 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

- Explorers* History 6th Class Digital. 7. Sustainability: Unit Stimulus
- Explorers* History 6th Class Student Book: 7. Sustainability pp. 38-43
- Selection of everyday items e.g. plastic bottle of water, eggs, woollen scarf, vegetables, cotton socks, pencils and books

Useful Links

Explore sustainability in the context of the United Nation's Sustainable Development Goals:

<https://www.globalgoals.org>

<https://www.un.org/sustainabledevelopment/sustainable-development-goals>

Use the forest cover maps from the Department of Agriculture to analyse forest cover in Ireland and/or your county:

<https://www.agriculture.gov.ie/forests-service/forests-service-general-information/forest-statistics-and-mapping/forest-cover-maps>

Find out more about sustainability in Ireland:

Sustainable Ireland: <http://sustainable.ie>

EPA: <https://www.epa.ie/research-and-education/research/research-pillars/sustainability>

SEAI: <https://www.seai.ie>

See how familiar fashion brands rate on their use of the Earth's natural resources (as well as their impact on people and animals) on the 'good on you' site:

<https://goodonyou.eco>

Keywords

natural resource, renewable, non-renewable, sustainability, decompose, deforestation, reduce, reuse, rethink, recycle, replace

Lesson Suggestions

- Use the digital Unit Stimulus to explore our dependency on natural resources. To what extent are the events in the mock newspaper possible? What would the knock-on effects be?
- Brainstorm the word 'sustainability'. What do children already know? What does sustainability mean to them? What do they associate with it? What questions do they have?
- Examine a selection of everyday items. What natural resources are needed to make them? Is more than one resource needed? Are those resources renewable or non-renewable? Of the renewable resources, do they renew over time or are they always present?
- Look at sustainability in the context of the United Nations' Sustainable Development Goals, particularly Goal 11: Sustainable Cities and Communities and Goal 12: Responsible Consumption and Production.
- Trace human use of the Earth's natural resources over time, examining the pattern of increasingly less sustainable living, particularly since the Industrial Revolution (History Unit 4).
- As per the sticker on p. 40 of the Student Book, use the link in the Useful Links section to analyse forest cover, either across the entire country or in your own county. Can children identify any of the larger forests?
- Use the five 'R's - reduce, reuse, recycle, rethink and replace - to come up with suggestions to make your classroom more sustainable. Draw up a classroom sustainability charter.
- Extend the list of 'swaps' on p.42 of the Student Book with other simple swaps that children can make to live more sustainably.
- Discuss examples from the locality, of individuals and/or businesses who have made changes to become more sustainable.
- As per the 'Working as a Geographer & Scientist: Investigating and Experimenting' activity on p. 43 of the Student Book, investigate daily use of natural resources.
- As per the 'Working as a Geographer & Scientist: Analysing' activity on p. 43 of the Student Book, analyse how sustainable the school is and create an action plan to help the school become more sustainable. This could be made into a proposal and presented to the principal.

Linkage and Integration

History: 4. The Industrial Revolution pp. 20-25; 6. Workshops and Factories pp. 30-35; 7. Young People Changing the World pp. 38-41.

Geography & Science: 5. Climate pp. 28-33; 6. Climate Breakdown pp. 34-37.

Science: Linked to *Materials: Properties and characteristics of materials*

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

Home/Parental Involvement

Children could analyse their use of natural resources at home and implement changes to live more sustainably.