

PROTECTING THE ENVIRONMENT:

Are we damaging our world?

Unit overview

In this unit, the children will consider if we are damaging our world and how we can protect it. The children will investigate energy production, the oceans and minerals, as well as conducting an enquiry into how the school can become more sustainable.

Knowledge, skills and concepts

In this unit, the children will:

- describe and understand key aspects of the distribution of natural resources including energy, minerals and water
- use maps, atlases and globes to locate countries and describe features studied
- use the eight points of a compass, symbols and keys to build their knowledge of the UK and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Background information

Scientists are providing increasingly compelling evidence of environmental change and stress. Around the world glaciers and ice sheets are retreating, the overall health and diversity of wildlife is declining, human numbers are increasing and natural resources are over-exploited. See the link 'The world's scarcest materials' to find figures about how resources are running out. These are worrying trends and many people believe we need to take firm action to address these problems.

One of the challenges for teachers is to find ways of introducing the children to environmental issues without leaving them feeling depressed or negative about what they discover. There is much to recommend a positive approach which considers solutions and seeks to engage children creatively. We also need to avoid suggesting to the children that it is their job to 'save the planet'. A more realistic approach draws attention to ways we have it in our power to make good choices and wise decisions on a personal and community level.

Ultimately, learning about sustainability challenges us to consider our relationship with nature. Celebrating the extraordinary and wonderful diversity of creation is a good starting point and will lay the foundations for an ethic of caring in later life.

Cross-curricular links

- **English:** writing a script (Week 1); producing a factsheet (Week 3); formal letter writing and persuasive texts (Weeks 3, 5); report writing (Week 4).
- **Science:** learning about minerals (Week 2); learning about energy production (Week 3); learning about habitats (Week 4); learning about marine life (Week 4).
- **Computing:** researching online (Weeks 1-4, 6); creating a comic strip (Week 2); creating a website (Week 6).

The Big Finish

The children are going to create their own campaign to raise awareness of conservation issues, e.g. the protection of a particular endangered animal or of a specific habitat. They will work in small groups to generate an idea, research it and then plan and present their ideas to others. The children are challenged to choose the most appropriate way to present their work: through leaflets, oral presentation, posters, videos, websites... the choices are endless!

Map work

The children will use maps and atlases throughout this unit to locate different countries, regions, oceans and habitats. They will learn to read a range of different types of map, including those that show mineral distribution around the world.

Fieldwork

This unit includes opportunities for fieldwork within the school grounds, looking at how the school grounds can be made more attractive to wildlife and investigating how sustainable the school is, and suggesting areas for improvement. The children will pose their own specific enquiry question, before collecting evidence from around the school.

Independent learning area

Create a sustainability centre within the classroom. Display local, national and world maps, as well as relevant non-fiction texts. Display news stories on sustainability issues. Allow the children to investigate the issues displayed, or issues of their own choice. Challenge them to find out a little about their issue of concern, including the causes and what can be done to improve the situation, before adding this to the maps. Include books on endangered wildlife and mineral resources.

Assessment

All children can:

- describe some threats to the health of our planet
- name several common minerals
- describe some renewable and non-renewable energy sources
- explain how humans rely on the oceans
- pose an enquiry question
- understand ways to make school more sustainable
- identify an important environmental issue.

Most children can:

- plan and carry out an enquiry into sustainability in school
- explain several threats to wildlife/habitats
- understand ways to improve the health of our planet
- explain where minerals are found around the world
- explain the carbon cycle
- describe some threats to our oceans
- understand some advantages of marine protected areas (MPAs).

Some children can:

- understand some ways in which minerals can be developed sustainably
- understand that no one type of energy production will provide all the world's energy.