
A Balanced Earth



curriculum links

Grade 5:

- ◆ Energy and Control: *Conservation of Energy*

overview

In this activity, a scale represents the earth and coloured blocks represent five different areas of impact (water, trees, energy, pollution and waste) that need to be kept in balance to keep the earth healthy. This activity introduces the concept of climate change and illustrates that every individual has the power to positively influence the world around him or her.



grade 5 expectations

Earth and Space Systems: Air and Water in the Environment

Overall Expectations

- ◆ demonstrate an understanding of the importance of conservation of energy in relation to the wise use of renewable and non-renewable energy sources;
- ◆ evaluate the reasons for conserving natural resources and identify possible ways of conserving energy.

Specific Expectations



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Understanding Basic Concepts

- distinguish between a renewable and a non-renewable source of energy.

Developing Skills of Inquiry, Design and Communication

- formulate questions about and identify needs and problems related to protection of the natural environment, and explore possible answers and solutions (e.g., investigate how local recycling efforts help conserve energy and natural resources);

Relating Science and Technology to the World Outside the School

- describe how we use different natural resources as sources of energy and evaluate the effect of their use on natural and human made environments (e.g., in using fossil fuels such as natural gas for heating our homes we deplete natural resources but improve our quality of life);
- explain ways in which technological innovations affect our use of natural resources and increase or decrease our ability to conserve energy (e.g., home insulation allows us to conserve heat and reduce consumption of energy from non-renewable sources).

key terms

Climate Change - A change in the earth's weather over time; can happen naturally (ie: the ice age); some people believe that deforestation, population growth and the burning of fossil fuels may be contributing to another climate change through increased global temperature (or global warming).

Fossil Fuel - An irreplaceable fuel source derived from coal, petroleum, natural gas or peat; fossil fuels are burned when we drive our cars.

