

Concept Cartoons®

Environmental Issues

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Produced by Millgate House Education in partnership with Practical Action

Concept Cartoons® Environmental Issues

Concept Cartoons® are cartoon-style drawings that put forward a range of viewpoints about a particular situation. They are designed to intrigue, provoke discussion and stimulate thinking. Concept Cartoons make concepts problematic and provide a stimulus for developing ideas further.

Each Concept Cartoon can be used to stimulate a free standing discussion and enquiry. Alternatively, the Concept Cartoons can be linked together to form a larger topic or to create a project related to environmental issues.

Some Concept Cartoons may look as if they are too easy for some learners, but their deceptive simplicity can stimulate discussion about more challenging concepts and can often reveal some basic misunderstandings. Learners can create their own Concept Cartoons as a way of assessing and reviewing their current understanding.

Concept Cartoons do not always have a single right answer.

Each Concept Cartoon has support material, including ideas for follow up and some possible answers.

- * Concept Cartoons are normally used to promote a group discussion.
- * Ask learners to discuss why each character in the Concept Cartoon might hold their particular idea. Do they have any other ideas that might go in the blank speech bubble?
- * Avoid being judgemental when learners are sharing their ideas. The uncertainty created by Concept Cartoons is productive.
- * Provide an opportunity for learners to explore, challenge or consolidate the ideas raised through the Concept Cartoon(s).
- * Provide time for learners to share their ideas.
- * Have they changed their minds and why?

To learn more about Concept Cartoons and how they are used, visit:



www.millgatehouse.co.uk



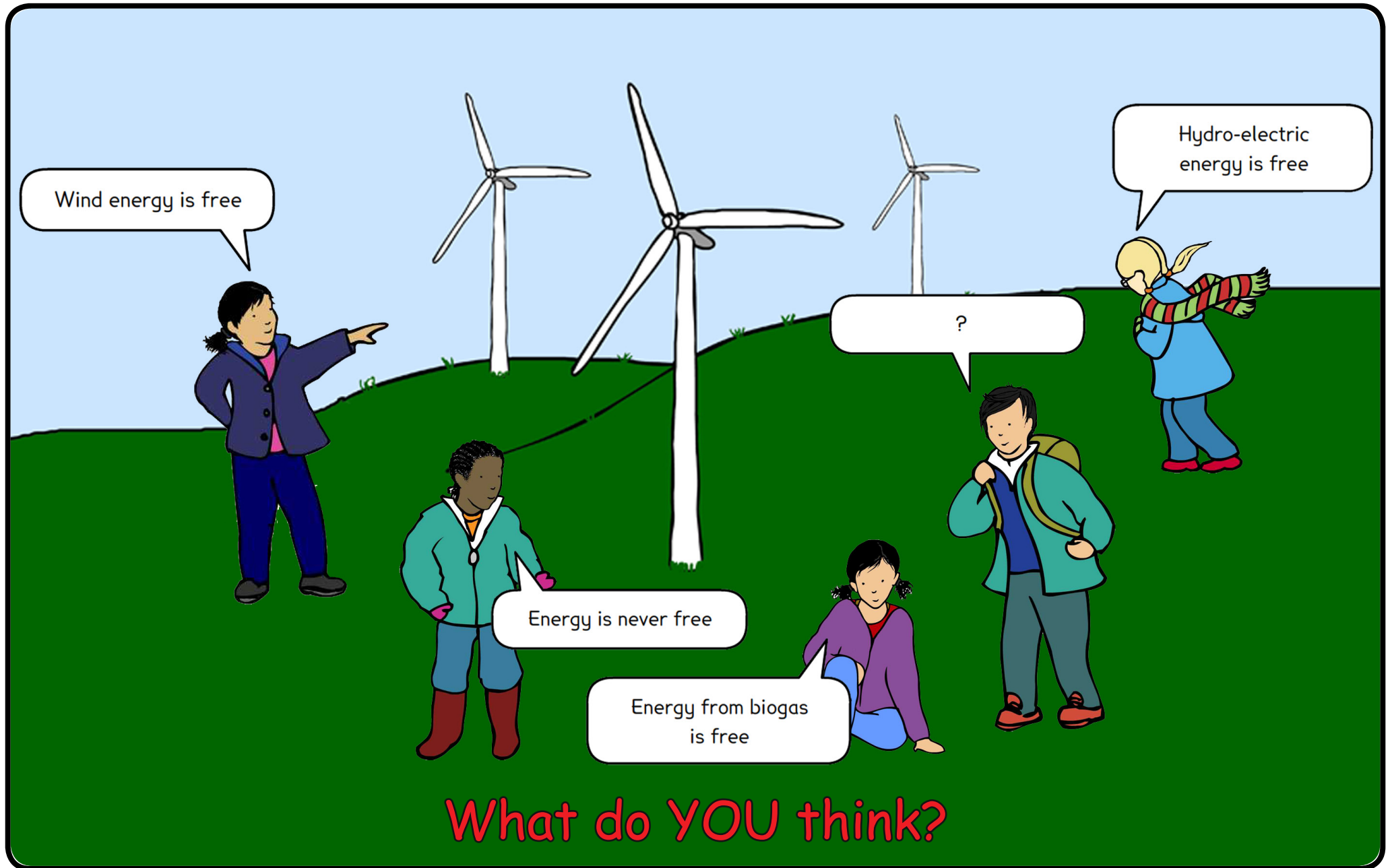
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2. Free Energy



Follow up

Talk about whether any energy is really free or if there is always a cost linked to having energy. Use the internet to research wind turbines, hydroelectric turbines, solar power, nuclear power stations and biogas. Find out where the energy comes from and what happens to it. How do these compare with other sources of energy? What does renewable and non-renewable energy mean, and how are these connected to climate change?

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Ideas



2. Free Energy

Concept Cartoons® Environmental Issues

Ideas

Making energy available in a useful form always costs something, even if we use natural resources. Wind turbines are expensive to build, and need to be strong to resist the weather. Hydroelectric dams are expensive to build and need to be strong to hold back the water they use to make electricity. Biogas requires anaerobic digesters to break down waste. Even solar panels are expensive to install. All of these natural sources can provide energy, but there is a cost involved in creating and maintaining them. Nuclear power stations are very expensive to build to ensure that they are safe and don't leak radiation. Nuclear waste stays radioactive for thousands of years and needs to be stored carefully. Produce a chart to show the advantages and disadvantages of different ways of producing electricity. In rural areas in remote parts of the world, small scale renewable energy is the only option available. Learn how to select the best type of renewable energy depending on the location and resources by using Moja Island from Practical Action <http://practicalaction.org/moja-island-1>

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