

Wildlife Energy Web Activity

This is one of our favourite activities to do at Brigit's Garden, and now you can do it in your classroom or school yard. Once you have the cards made you can use them again, or share them with your colleagues.

This activity helps students to understand the concept of food webs, where energy comes from, and how it is transferred in the environment. The activity also allows students to become more familiar with Irish wildlife. All of the plants and creatures in this activity are found in and around Brigit's Garden in Co. Galway.

Suitable for 3rd to 6th class.



To make the activity

You will need:

- Colour printer
- Scissors
- Ball of string or wool
- Hole puncher
- Optional: Laminating pouches and laminator or polypockets

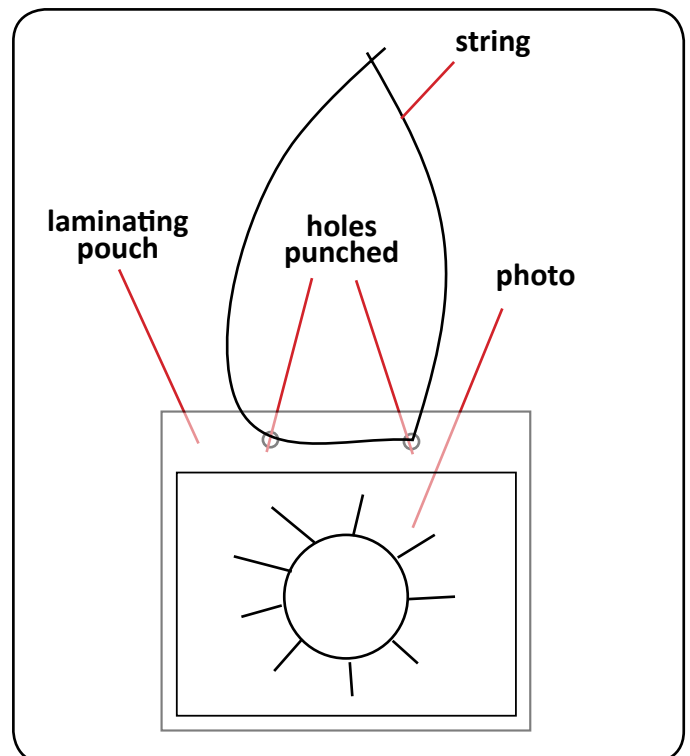
1. Print out the pdf document on a colour printer.
2. Fold and cut the pages as marked.
3. Laminate the pages leaving extra plastic at the top to punch holes in. (Laminating is optional but it will make them last longer and will be more suitable for outdoor activities. Alternatively you can use a reusable A5 size polypocket).
4. Thread a string through the holes so that the children can hang them around their necks to keep their hands free.



Curriculum links

SESE Strand units:

- Plant and Animal life
- Light
- Environmental awareness
- Caring for the environment



Thank you to 'Global Schools: Primary Education for a Just World' who supported the creation of this resource. For more global citizenship activities from around the worlds see www.globalschools.education

To book an educational workshop or school tour at Brigit's Garden, call 091 550 905 or email info@brigitsgarden.ie

www.brigitsgarden.ie

FOLD UNDER IMAGE

How to play:

You will need:

- Energy cards you have made from this pack
- Ball of string or wool

This game can be played outside or in a classroom with the tables pushed out of the way.

1. Ask all of the students to stand in a circle.
2. Give one picture card to each child. Ask them to have a look at it and hang it around their neck.
3. Ask the child with the sun picture card to stand in the middle of the circle.
4. Check that the students all know what creature/plant they are. Explain that these animals and plants can all be found in Ireland.
5. Ask the children to have a look around the circle and think about who or what they might eat, and what might eat them.
6. Explain that the sun is the source of nearly all energy on earth. Hold onto the ball of string (the facilitator should hold onto the ball of string at all times) and ask the student with the sun card to hold the end of the string in their hand.
7. Now ask who in the circle would get their energy from the sun. One of the students with a tree or plant card should be selected by the group. Unravel the ball of string a bit and give that student a part of the string to hold, connecting them with the sun. The student with the sun card should continue holding the end of the string for the entire game.
8. Now ask if there is anyone in the circle that would get their energy from eating the plant shown on the card of the student now holding the string.
9. Continue in this line of questioning, connecting students one-by-one to others who would eat or be eaten by them, referring back to the fact that food provides energy. If you get stuck at the top of the food chain you can work your way back down again, or a student might notice that their creature will eat the remains of dead animals, continuing with the chain.
10. When all the students are connected (you can connect some students more than once) you should have an energy food web for all to see.
Optional: ask the student with the tree card to imagine that they have been cut down. Tell them to hold the string they are holding close to the ground. Ask if any of the other students feel this pulling tighter on their part of the string. Anyone who feels the string tighten should also hold their bit of the string close to the ground. Eventually most or all students will have to hold their string close to the ground.
11. Ask the students what this activity might show us. Answers could be for example that it shows how everything in nature is connected or that we all get our energy from the sun.
12. Roll up the string starting with the last student holding it. Ask the students to hold on to their bit of the string until you come around to them to avoid knots!

There are enough cards for 20 players.

If you have more students playing, two can share one card, with one child holding the card and the other holding the string.

Fantastic Photosynthesis!

Green plants and trees can do something really amazing that we can't do. They can make their own food using the energy from the sun, water and carbon dioxide. Thanks to the green stuff in their leaves called **chlorophyll** they can harness the energy of the sun and turn it into food.

This process is called **photosynthesis**. 'Photo' means 'light' and 'synthesis' means to 'make' or 'put together'. During photosynthesis plants take in carbon dioxide and give out oxygen.

Without photosynthesis we would have no plants...and then what would the animals eat? It would be a very different world without photosynthesis!

Climate Change

Scientists have found that human activity such as burning fossil fuels releases carbon dioxide into the atmosphere.

Higher levels of carbon dioxide in the atmosphere are causing our oceans to warm up slightly. This is causing the polar ice caps to melt and is having an effect on climate patterns around the world.

Can you think of 5 reasons why it is important to plant trees and look after them?



Gets energy from eating:
earthworms, frogs, snails,
caterpillars, plant roots
and fruit

Badger *Broc*



FOLD UNDER IMAGE ↗



Gets energy from the sun
through photosynthesis

Cabbage *Cabáiste*



FOLD UNDER IMAGE →



nectar and pollen from flowers

Gets energy from eating:

Bumbóg / Beach fhiðin

Bumblebee



FOLD UNDER IMAGE ↗



Gets energy from eating:
leaves

Caterpillar ***Péist cháil***



FOLD UNDER IMAGE →



dead animals.

things in the soil like dead leaves,
bacteria and the remains of

Gets energy from eating:

Péist thalún

Earthworm

FOLD UNDER IMAGE →



FOLD UNDER IMAGE →

FOX
Sionnach / Madra rua

Gets energy from eating:

Frogs, birds, mice, caterpillars,

berries, remains of dead animals





Gets energy from eating:
Flies, snails, slugs, earthworms

Frog
Frog



FOLD UNDER IMAGE ↗



Gets energy from eating:
greenfly (aphids)

Ladybird *Bóin Dé*



FOLD UNDER IMAGE



Gets energy from:
sucking plant juices out of the
leaves, stems, or roots of plants.

Greenfly (aphid)
Culex ghlas



FOLD UNDER IMAGE



Gets energy from the sun
through photosynthesis

Crann darach

Oak tree



FOLD UNDER IMAGE





Long-eared owl
Uíchabhán / Ceann cait
Gets energy from eating:
Mice, frogs, small birds



FOLD UNDER IMAGE ↗



Gets energy from eating:
nuts, seeds, berries,
earthworms and insects

Robin *Spideog*



FOLD UNDER IMAGE





Gets energy from eating:
fruit and leaves

Snail *Slide*



FOLD UNDER IMAGE ↗



Gets energy from the sun
through photosynthesis

Blackberry
Sméar dhubh

FOLD UNDER IMAGE →





Gets energy from the sun
through photosynthesis

Apple tree ***Crann ùll***



FOLD UNDER IMAGE ↗



Gets energy from eating:
mice and birds

Sparrowhawk
Sporog

FOLD UNDER IMAGE →





Get energy from the sun
through photosynthesis

Wildflowers ***Bláthanna léana***



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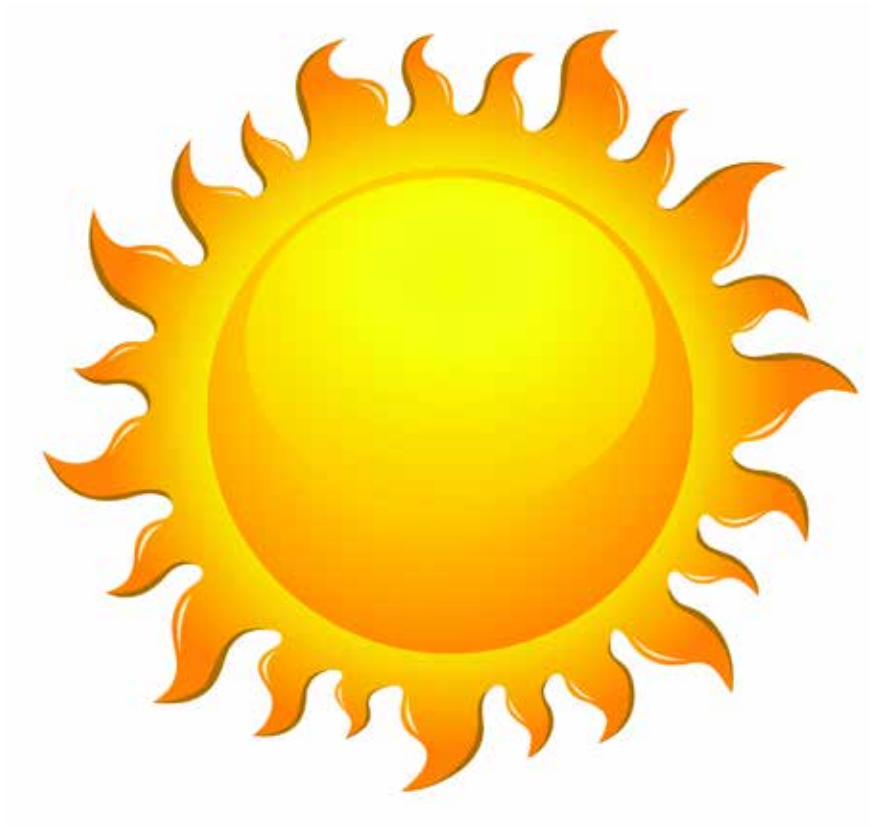


Gets energy from eating:
worms, berries, seeds and
acorns.

Woodmouse *Luch colle*



FOLD UNDER IMAGE



The Sun
An Ghrian



FOLD UNDER IMAGE ↗



Gets energy from eating:
worms, snails, berries, seeds
and fruit.

Blackbird *Lon dubh*



FOLD UNDER IMAGE

