**Food web art!**



**To do**

1. Visit a local ecosystem. This might be the school grounds, a garden at home, or somewhere else nearby.
2. Draw or paint several of the organisms that live in the ecosystem.
3. In your picture, show the feeding relationships between the organisms you have drawn.

*Biology> Big idea BOE: Organisms and their environments > Topic BOE1: Interdependence of organisms > Key concept BOE1.1: Food chains and food webs*

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| **Response activity** |
| **Food web art!** |

**Overview**

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| Learning focus: | Feeding relationships within a community of organisms can be modelled using food chain and food web diagrams. |
| Observable learning outcome: | Recognise that food web diagrams represent several interconnected food chains within a community of organisms |
| Activity type: | Drawing |
| Key words: | food chain, food web |

This activity can help develop students’ understanding of food webs through place-based art. It can be used in response to the following diagnostic question:

* Diagnostic question: Food web

**What does the research say?**

Learning about food chains and food webs can help to increase students’ emotional involvement and engagement with biology (Alsop, 2001). Barker and Slingsby (2011) emphasise that developing understanding of the key ecological concepts of food chains and food webs is best achieved in the context of real ecosystems that students can visit, observe and explore; as they put it, “What we are trying to do is make them leap out of the textbooks”.

A number of authors have suggested ways to increase students’ cognitive and emotional engagement with the key concept of food chains and food webs which may help to develop their understanding, including through place-based art (Conkey and Green, 2018). Drawing has been used to assess students’ understanding of the environment and ecosystem complexity (Moseley, Desjean-Perrotta and Utley, 2010; Flowers et al., 2015), and it has been argued that ecosystem-based art enables students to practice communication skills and develop ecological literacies involving ideas about interdependence, systems, biodiversity, conservation and sustainability (Inwood, 2008).

**Ways to use this activity**

Students should be asked to visit a local ecosystem (which could be as simple as the garden at their home, or the school grounds) and to draw or paint a picture of organisms in that ecosystem and their feeding relationships.

Students should be supervised while working out in the field.

Students should complete this activity individually, to think about, research and construct food chains involved in their own breakfast. The activity could be set as a homework, and could be followed up with small group discussion of the drawings or paintings the students have produced.

**Equipment**

For each student (if done during a lesson, rather than as homework):

* pencils, pens, paints or crayons
* paper (if not drawing on the worksheet)

**Expected answers**

There is likely to be considerable variation in the drawings and paintings produced by the students, but they should illustrate the feeding relationships within a local ecosystem. Some may include arrows, like a food web. Others may be less diagrammatic and more literal, such as illustrating a bird eat seeds from a plant, while a cat sits nearby.

**Acknowledgments**

Developed by Alistair Moore (UYSEG), from an idea described by Conkey and Green (2018).

Images: pixabay.com/3dman\_eu (1019939)

**References**

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