

5.3 Who eats what?

Lesson outcomes

At the end of this activity students will be able to:

- construct and interpret food chain and food web diagrams
- understand that food chains and food webs show how energy is transferred through ecosystems.

What ideas might your students already have?

- Students may be surprised that the Antarctic Ocean region has so much life. They will tend to link warm climates with abundant life, which tends to be true on land but not in the oceans.

Key vocabulary

Food chain, food web.

Things to consider

This short activity is designed to get across one idea, that food chains and food webs describe the transfer of energy through biological systems. Students will have learnt about various cycles, such as the carbon cycle and the water cycle. Food chains describe the one way transfer of energy, originally from sunlight and ultimately ending up as waste heat.

Teacher content information

The most important idea in this unit follows on from earlier activities that emphasised that most food consumption is as an energy source. In fact the transfer of energy through food chains is quite inefficient (around 10% in most cases). This means that at least 10 times as much biomass is required as you go down from one trophic level to the next.

Lesson plan

Students complete the questions posed in the *Student Guide*, introducing them to the link between food chains and food webs.