

Knowledge box 3



Geography Plus: Little Blue Planet

These knowledge boxes provide background information for teachers to help develop knowledge for teaching about *Little Blue Planet*. For lots more useful sources of information, along with recommended storybooks for pupils' reading, have a look at the **Useful information: weblinks, storybooks and references** sheet. Make sure you have a look at the 'Notes' on the PowerPoints as well; they offer useful snippets of information and questions for your pupils.

Lesson 4: Thank you ocean

Visit www.safeshare.tv/v/hwVUo-2Qnso or www.youtube.com/watch?v=hwVUo-2Qnso

This short video explains how oceans began millions of years ago. Although some of the commentary uses challenging vocabulary, you may want to show it to your pupils as the images are stunning and convey a story very well.

Phytoplankton

Fish, whales, dolphins, crabs, seabirds and just about everything else living in or off the oceans owe their existence to phytoplankton, one-celled plants that live at the ocean surface. Phytoplankton not only provide a food source for herbivorous marine creatures (which are in turn eaten by carnivorous creatures), they also produce oxygen through the process of photosynthesis. In fact, half the world's oxygen is produced by phytoplankton photosynthesis with the other half produced on land by trees and other plants. (Roach, 2004. For more information see http://news.nationalgeographic.com/news/2004/06/0607_040607_phytoplankton.html)

Whales

Whales can be divided into two categories: toothed whales and baleen whales. Toothed whales include killer whales, sperm whales and beluga whales. Some of the larger, toothed whales can feed on large prey such as seals, although they mainly eat fish, squid and shellfish from the ocean floor. There are 11 species of baleen whales in total, including the humpback whale, blue whale and finback whale. Rather than teeth, baleen whales have hard, bone-like plates (known as baleen) in their mouths. These feed on plankton and krill through filter-feeding: they swim with their mouths open and then filter the water back into the ocean through their baleen, keeping the food inside.



Humpback whale. Photo: Morguefile/matthew_hull.

(Whale Facts, 2009. For more information see www.whale-facts.net/types_of_whales/types_of_whales.html)