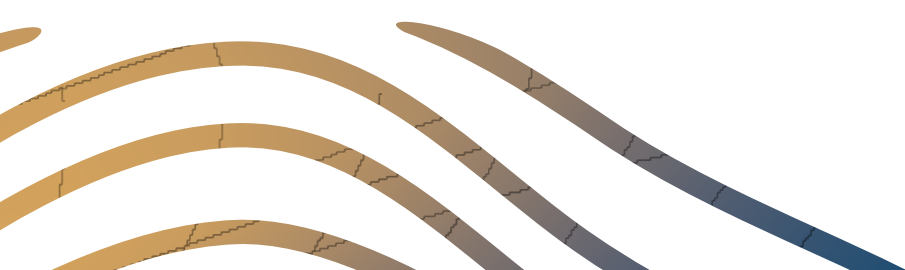




**THE OCEAN SENSES  
ACTIVITIES BOOK**



The background is a solid orange color with several light orange, wavy, curved lines that sweep across the frame from the top right and bottom left towards the center. The lines vary in thickness and curvature, creating a sense of movement and depth.

**TOUCH**



## SCULPTING FORAMINIFERA

### Focus:

To appreciate the biodiversity of the Arctic Ocean and ocean floor, with a particular focus on lesser-known species like foraminifera.

### Learning objectives:

In this activity, pupils will identify (one, two, or several) foraminifera species living at or close to the Arctic Ocean floor and sculpt them using modelling clay.

### Key words:

Foraminifera, Benthic, Planktonic.

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### IN SHORT (FOR THE TEACHER):

This a creative activity that can help to consolidate knowledge about foraminifera, which are seldom discussed in the classroom. Foraminifera are hugely diverse and abundant in the ocean and have been found on Earth for hundreds of millions of years! You will need to do some background research about foraminifera to present to your class and share stories whilst you and your students sculpt.

#### Materials:

To make the sculptures, pupils should have the following at their disposal:

- Modelling clay
- Paints and/or pens to add color to give their creations more character.

#### Teaching Time:

90+ minutes.



Example of sculpting some ocean micro-organisms called Foraminifera.  
(Illustrator Heike Jane Zimmermann in a photo by Davide Oddone)

#### More information:

ArcOD Arctic Ocean Diversity Program <http://www.arcodiv.org/>

## BACKGROUND STORY:

Foraminifera have been living on Earth since the early Cambrian period, some 500 million years ago. This means that foraminifera have been on Earth much longer than the dinosaurs and, in contrast to these, are still living among us nearly everywhere on the planet. There are more than 20,000 known species of foraminifera and more are continuously being discovered.

Foraminifera live in all kinds of environments, swimming in the ocean, at the ocean floor, in freshwater systems, and their shells can be found in many well-known places on land, including sandy beaches, fossilized in the Dolomites and large parts of the Alpine regions, in the pyramids of Egypt and more.

Because of their calcium carbonate shells that are well-preserved as fossils, foraminifera can tell scientists about past and present climate and environmental changes on Earth.

## Learning procedure:

You, the teacher, can choose 2-4 different foraminifera from the Arctic Ocean (see the next page for some examples). Present these species to the class in a presentation with photos and come background information. The photos you use (or the ones on the next page) can be used by the pupils to sculpt their own versions of the species.

Pupils are then given the time and support to craft their species of choice, talking to each other and you in the process. You can also sculpt your own model as well.

While everyone is crafting their models, you can share some more information on the differences between micro-, meio-, and macrofauna, as well as more specific details regarding each species.



Example of fossilized Foraminifera  
(Image: fickleandfreckled via Flickr Creative Commons)