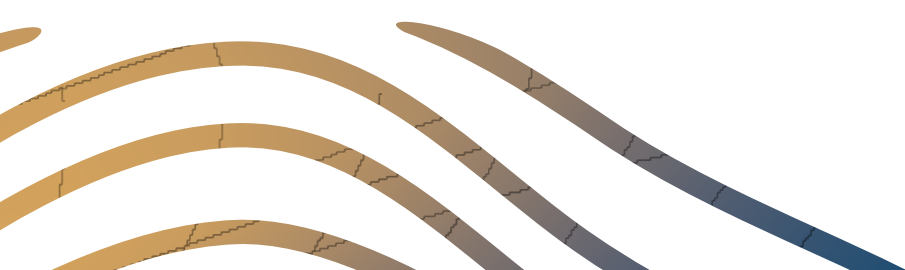




**THE OCEAN SENSES
ACTIVITIES BOOK**



The background is a solid orange color with several light orange, wavy, brushstroke-like lines that curve across the top and bottom of the page. The word "TOUCH" is centered in the middle of the page in a white, bold, sans-serif font.

TOUCH



HUMAN IMPACT: ECOLOGICAL FOOTPRINTS

Focus:

To understand the meaning of the human ecological footprint. Pupils will think about questions like how do our actions (e.g., research) affect the environment around us and, what can we do to reduce the human impact on the oceans?

Learning objectives:

In this activity, pupils will learn to develop an understanding of their relationship with the oceans and the marine environment and hopefully be inspired to turn their knowledge into action.

Key words:

Human impact, footprints, action.

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IN SHORT (FOR THE TEACHER):

In this activity, you and your class will connect ideas about ecological footprints with the hands-on task of making one's own footprints in sand (or snow or soil).

Your pupils will make their own footprints and then consider what that means. They will consider how one can smoothen over or remove one's footprints on different surfaces.

Materials:

This activity is probably best done outside in an area where there is sand or another appropriate surface to make footprints. If you need to carry out the activity inside, then you may need the following:

- An old sheet or tablecloth (to protect your work surface)
- Sand to empty onto the old sheet or tablecloth.
- A device to take photos.
- A photo frame to place around some of the footprint to then take photos.

Teaching Time:

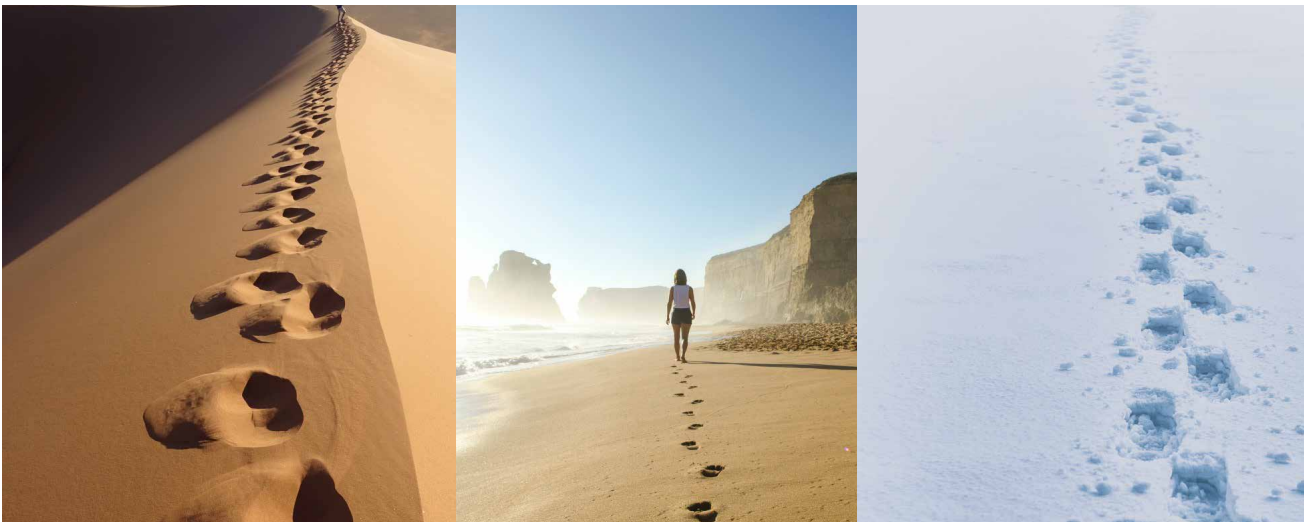
The amount of time will depend on the distance to the chosen location outside, or the time needed to set things up in the classroom.

Classroom organisation:

Pupils can work in pairs or small groups to make footprints and take photos. The discussion afterwards can include the whole class together.

BACKGROUND STORY:

The ecological footprint measures the demands made by a person or group of people on global natural resources. It has become one of the most widely used measures of humanity's effect on the environment. It has been used to highlight both the apparent unsustainability of current practices and the inequalities in resource consumption between and within countries. (Source: Hayden, Anders. "ecological footprint", Encyclopedia Britannica, 26 Dec. 2019, <https://www.britannica.com/science/ecological-footprint>. Accessed 7 June 2022)



Examples of footprints in the desert (Image left: Éric Deschaintre on Unsplash), the beach (Image middle: Brian Mann on Unsplash) and in the snow (Image right: Eberhard Grossgasteiger on Unsplash)

Learning procedure:

You can start by discussing what an ecological footprint is with your class. Once this discussion is complete, you and your pupils will make your footprints. If you need to carry out this activity in the classroom, start by covering the work surface with something to catch the sand. Make an imprint on the sand with your foot. Place the frames around some of the footprints and take some photos.

This activity can also be done outside if you live near an area with snow, sand, or bare soil. Make some footprints on the surface and use your frames to frame them. You can also take photos of the prints and display them in your classroom. Use these footprints (and photos) to have a deeper discussion with your class. You can also make a small exhibition of the photos to display in the classroom.

Discussion points:

- Share your ideas on what you see in the frames/photos.
- Footprints on different surfaces require different processes to remove. For example, at the beach, waves may smooth over the footprints. In the desert, the wind might do this job. But what about snow? What needs to happen to get rid of the prints? If we need to smooth over the footprints manually, does the surface look the same as before?
- How are the footprints we have made similar to our ecological footprints? What are our ecological footprints on land and in the ocean? Are our ecological footprints easy to smooth over? What is required to do this, and do our efforts leave a mark?