



OBSERVATION OF ORGANISMS IN THE SOIL

Title	Observation of organisms in the soil
Skills	- Social and civic competences; - Scientific knowledge; - Communication and management
Topics	- Education for sustainable development; - Science and biodiversity; - Connection with nature.
Target Groups	- boys and girls (3-11 years); - people with special needs; - young people (12-25 years);
Brief description	The practice of observing soil organisms is an essential educational activity that immerses participants in the fascinating underground world of soil biodiversity. Through this activity, participants discover the variety and importance of organisms living in the soil, from invisible microbes to invertebrates such as earthworms and beetles. The exploration helps them understand how these organisms contribute to essential ecological processes such as organic matter decomposition and soil fertilisation, which are fundamental to the health of our planet. During the activity, participants use tools such as magnifying glasses and hand-held microscopes to observe soil organisms directly, learning to identify various species with the help of field guides. This detailed observation not only increases scientific knowledge, but also fosters a greater respect and appreciation for biodiversity that often goes unnoticed. In addition, the activity provides an opportunity to discuss the impact of human activities on





	soil and how to adopt more sustainable practices to protect these vital ecosystems. The session is designed not only to educate, but also to inspire. At the end of the activity, participants are encouraged to reflect on the link between soil health and human health, as well as the role each can play in promoting sustainable agricultural and gardening practices. These discussions and reflections aim to provide participants with the knowledge and motivation to be active advocates for soil conservation in their communities.
Objectives	- Encourage the appreciation and respect of soil biodiversity. - Provide practical knowledge on how to identify different soil organisms. - Raising awareness of the importance of soil conservation and its inhabitants.
Materials	- Magnifiers or portable microscopes. - Observation trays. - Soft brushes for sample handling. - Field guides for the identification of soil organisms. - Notebooks and pens for notes.
Implementation	1- Preparation: distribute the necessary observation tools to each group. 2- Sample collection: Lead participants in collecting soil samples from different areas. 3- Observation and classification: observe the samples with magnifying glasses and classify the organisms found with the help of field guides. 4- Discussion and reflection: encourage a discussion on the importance of each organism observed and its role in the soil ecosystem. 5- Recording results: encourage participants to record their observations and conclusions in their notebooks.
Evaluation	The evaluation of the soil organism observation activity will be carried out through various methods designed to measure both the engagement of the participants and the effectiveness of the session in terms of learning and practical application. Firstly, direct observations during





	the activity will be used to assess active participation, the interest shown by participants and their ability to apply organism observation and classification techniques. This qualitative approach allows facilitators to adjust the pace and focus of the session in real time to maximise participation and learning. In addition, feedback surveys will be distributed to participants at the end of the session to collect their perceptions on the usefulness and interest of the activity. These surveys will include questions on the clarity of the instructions, the relevance of the information provided, and how they think they will apply what they learned in their personal or professional context. The responses will help identify areas of strength and opportunities for improvement for future sessions. An evaluation module will also be conducted for each participant, which will include specific questions on the learning objectives of the activity, such as recognising specific types of soil organisms and understanding their ecological role. This module will measure the knowledge acquired and the participants' ability to apply it in a practical manner. Finally, a post-activity review will take place with the entire education team to discuss the results of the evaluations and plan improvements based on the data collected. This continuous evaluation process is essential to maintain the quality and relevance of the activity, ensuring that each session is informative, engaging and tailored to the needs of the participants.
Tips	- Ensure that each participant has access to observation tools. - Include variation in sample collection locations to explore different soil types and biodiversity. - Prepare visual and theoretical support material to aid identification and understanding of the organisms observed. - Consider the weather conditions; if the weather does not permit outdoor exploration, prepare





	previously collected soil samples for indoor observation.
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