

Creating a Microhike: Exploring Nature up Close



Curriculum Links

Scotland

I can explore and experiment with digital technologies and can use what I learn to support and enhance my learning in different contexts

TCH-01
LIT-06

UK

use technology purposefully to create, organise, store, manipulate and retrieve digital content

Key Concept

I can create a microhike using string, explore small-scale environments, and document my findings using ICT tools.

4
QUALITY
EDUCATION



15
LIFE
ON LAND



Background

A microhike is a fun and engaging way to explore nature on a small scale. Using just a piece of string, learners will set up a miniature hiking trail and carefully observe the environment along their microhike. They'll use ICT tools, such as tablets or cameras, to document what they discover and create a digital presentation or nature report. This activity promotes careful observation, critical thinking, and digital literacy while encouraging learners to appreciate the often-overlooked details of the natural world.

Resources

- 1–2 meters of string per group
- Tablets or digital cameras
- Clipboards, paper, and pencils for note-taking
- Measuring tapes or rulers (optional)
- Magnifying glasses (optional)
- Access to a computer or tablet for creating a digital presentation or report

Wider Skills

- Observation: Learners carefully explore and record details about a small-scale environment.
- Digital literacy: Using ICT tools to document findings enhances technological skills.
- Collaboration: Working in pairs or groups fosters teamwork and communication.
- Problem-solving: Learners overcome challenges such as identifying small organisms or capturing detailed photos.
- Creativity: Creating a digital presentation encourages imaginative storytelling and design.

Lesson

Introduction (10 minutes):

- Begin by discussing how nature is full of small details we often overlook. Ask learners: "What kinds of living things or objects might we find on the ground if we look closely?"
- Explain that they will be creating a "microhike" using a piece of string to mark a small trail (1–2 meters long) and exploring what they find along it.
- Show examples of what they might look for, such as tiny plants, insects, interesting textures, or colours.
- Introduce the use of ICT tools: They will take photos or videos along their microhike and create a digital nature report or presentation about their findings.

Main Activity (40 minutes):

- Part 1: Setting Up the Microhike (10 minutes)
- Divide learners into small groups and give each group a 1–2 meter piece of string.
- Ask them to choose a small area outdoors (or indoors if necessary) where they can lay out their string in a straight or curved line.
- Encourage them to think creatively—placing their string over grass, soil, or other surfaces will give them varied results.
- Part 2: Exploring and Documenting (20 minutes)
- Once the string is set, learners will slowly "hike" along their micro trail, observing what they see up close.
- They should use tablets or cameras to take pictures or videos of interesting findings, such as insects, small plants, or unusual textures.
- Ask them to take notes on what they find, including size, colour, shape, and any other interesting details.
- Provide magnifying glasses if available to help them look more closely at tiny objects.
- Part 3: Creating the Digital Report (10 minutes)
- Back in the classroom, learners will use their photos and notes to create a short digital presentation or nature report.
- Encourage them to organize their findings into categories, such as "Insects," "Plants," and "Textures." They can add captions, fun facts, or even a short story about their microhike.
- If time allows, they can present their reports to the class or upload them to a shared digital space.

Lesson

Plenary (10 minutes):

- Invite a few groups to share their digital presentations or highlight a favourite discovery they made during their microhike.
- Lead a discussion using questions such as:
 - What surprised you during your microhike?
 - How did using technology help you explore nature?
 - Why is it important to look closely at small things in nature?
- Wrap up by emphasizing that nature is full of wonders, even in the smallest spaces, and that exploring with curiosity helps us learn more about the world.

Key Questions

- What kinds of plants or animals did you discover along your microhike?
- How did using string help you focus on a specific area?
- How can technology help us learn more about nature?
- What might happen if we didn't pay attention to small things in our environment?

Assessment

Observation of engagement:

Note how carefully learners observe and document their microhikes, including whether they explore different types of surfaces and objects.

Quality of documentation:

Assess the photos, videos, or notes they take, focusing on attention to detail and creativity in capturing different aspects of their microhike.

Digital presentation:

Evaluate their digital report or presentation based on organization, clarity, and use of photos or videos.

Reflection:

Use responses during the plenary to assess learners' understanding of observation and their ability to reflect on what they learned.

Extension task:

(Optional) Challenge learners to create a second microhike in a different environment (e.g., under a tree or near water) and compare their findings.

Notes

- Consider linking this lesson with a follow-up on ecosystems or biodiversity, discussing how small organisms contribute to the health of the environment.
- Encourage learners to share their digital presentations with parents or other classes to promote learning beyond the classroom.

Younger Classes

Younger children:

- Guided exploration: Provide more guidance by helping them set up the string and assisting with observation. Focus on big, obvious findings like leaves or large insects.
- Hands-on focus: Encourage drawing their findings instead of using ICT tools if they are too young to handle digital devices independently.
- Shortened activity: Reduce the time for the microhike and focus on a few key observations to maintain attention.

Older Classes

- Advanced documentation: Challenge older learners to include measurements (e.g., the length of a plant or insect) and more detailed notes.
- ICT extension: Encourage them to use additional apps or tools, such as digital microscopes or video editing software, to enhance their presentations.
- STEM connection: Link the lesson to environmental science by discussing how studying small ecosystems can help us understand larger ones.