SOIL STORIES: PAINTING AND PROTECTING OUR LIVING EARTH

Feedback form link & QR code:

https://ecolise.eu/curiosoil-lesson-plan-form-EN

Subject: **Art & Environmental Science**
Duration: 45 minutes
Age Group: 14–16 years
Topic: Art & Soil – Discovering the beauty and value of soil through art
Connection to Curiosoil Tools: Supports “Awakening Soil Curiosity” and soil competence frameworks.

Learning outcomes

Knowledge
- Understand basic soil functions, diversity, threats, and possible solutions.
- Recognize soil as a critical living system.

Skills
- Creatively use soil as an artistic medium and source of inspiration.
- Observe, describe, and visually represent soil diversity.

Competences
- Engage in environmental stewardship through art.
- Communicate positive soil-protection messages.

Learning objectives aligned with soil competence areas

Area	Indicators	Descriptors
1. Soil functions	Knows soil roles (e.g., nutrient cycling, water regulation)	Can illustrate and explain soil's role in supporting life
2. Soil diversity	Identifies different soils, colors, organisms	Observes, draws, and discusses variations in soil appearance
3. Soil threats	Recognizes erosion, pollution, compaction, loss of life	Can create art about threats; discusses protective actions
4. Soil solutions	Explains methods to protect/improve soil	Illustrates solutions, e.g., planting, composting, cover crops

LESSON STRUCTURE

Activity Title
SOIL STORIES: PAINTING AND PROTECTING OUR LIVING EARTH

Description
Students will explore soil’s diversity and functions by creating “soil art” (using homemade soil paint or colour pencils inspired by soil samples). They will depict not just what soil looks like but also create “Soil Superhero” posters – fun characters that highlight positive soil solutions.

Materials
- Paper (A4 or recycled)
- Soil samples (can be gathered from different environments: garden, forest, compost). Make sure the samples are NOT from protected areas, and you have asked for permission from the owner of the land.
- Water + small cups/jars (for mixing)
- Simple brushes OR cotton buds/sticks
- Optional: Colour pencils/markers/paints if soil paint isn't feasible
- Pencils, eraser
- Old newspaper or disposable tablecloth for tabletops
- Hand wipes or access to washing area

Setup instructions
- Place samples/materials on group tables.
- Lay newspaper to protect surfaces.
- Display inspiration images of soil layers/artworks (projector or printouts, see ANNEX)
- Have hand wipes ready for cleanup.

Step-by-step process

1. Introduction (5 min)

Short interactive talk: "What is soil? Why is it important? What did we find in our soil samples?"
Quick group brainstorm: "What threatens soil? How can we help soils?"

2. Creative exploration (15 min)

- Show colourful soil samples (real or images).
- Demo: Mix a bit of soil with water in a jar. "Paint" a sample area.
- Students try making their own "soil paint" (or use colours that match their soil observations).
- Create their own "soil landscape" – abstract or realistic, showing soil layers, roots, critters, etc.

3. Soil Superhero poster (20 min)

- Transition: "Let's become Soil Superheroes! Create a character who protects soil and fights threats."
- Students sketch/draw their superhero: Name, powers (e.g., Clean-Up Captain, Compost Queen, Mulch Man), and soil-saving actions.
- Add a slogan/message: e.g. "Save Our Soils!" or "Soil Is Life!"

4. Show & share (5 min)

- Students present their artwork/poster ("My superhero protects soil by…").
- Positive feedback focus.

Recording

- Photograph student work for classroom display or digital gallery.
- Optional: Post best artworks on a class social media (with their permission).

Follow-up documentation

- Short reflection as a 1–2 sentence summary: “One thing I learned about soil…”

Syllabus content reference

- Art: Mixed media, poster design, environmental art.
- Science: Basic soil science – composition, biodiversity, threats, protection.

Assessment

Formative assessment
Teacher observes participation, creativity, and scientific connections in discussion and art.
Summative Assessment
Finished artwork and short reflection sentence assessed for engagement with key soil concepts and positive solution ideas.

Differentiation strategies

For advanced learners
Invite to research a specific soil organism; add details or extra “soil functions” to artwork.
For struggling learners
Offer step-by-step drawing support; provide stencils or templates; accept oral explanations.
For students whose first language is not the language of instruction
Use labeled images, visual instructions, and allow drawing/writing in their mother tongue for keywords.

Extension activities

Immediate extensions
- Class soil mural combining everyone’s art.
- Research a local soil restorer and make a “thank you” card in class.
Home learning
- Investigate a patch of soil in your close neighbourhood; write/draw what lives there, any “soil solutions” seen in action.

Health and safety considerations
Use clean, non-toxic soil only.
No tasting or touching face during activity.
Wash hands afterwards.

BACKGROUND INFORMATION

1. Andy Goldsworthy
   - Renowned land artist who uses soil, clay, and other natural materials in stunning outdoor installations.
https://www.youtube.com/watch?v=I051qmxvDIE

2. Walter De Maria’s “Earth Room”
   - A room filled with soil as an immersive, contemplative art installation in a gallery setting.
https://en.wikipedia.org/wiki/The_New_York_Earth_Room#/media/File:New_York_Earth_Room_in_2024.jpg

3. David Sheil Studio
   - Contemporary artist specializing in natural soil pigments, hand-ground and used for painting, connecting art to specific places.

https://www.davidsheilstudio.com/blog/categories/soil-art

4. Kirsten Kurtz's "Three Sisters in Soil"
   - Uses real soils and traditional techniques to create collaborative paintings depicting the story of the "Three Sisters" crops.
https://soilpainting.com/gallery

5. Shannon Garden-Smith: Sand Silhouette
   - Vibrant patterns and public interaction using colored sand and soil to create large-scale ground art.
   https://www.shannongardensmith.com/sand-silhouette

6. USDA Natural Resources Conservation Service – Painting With Soil
   - Step-by-step guide and student artworks using real soil as paint.
https://www.nrcs.usda.gov/resources/education-and-teaching-materials/painting-with-soil

7. Science Societies – Drawing, Writing, and Painting with Soils
   - Artworks and stories from soil-based painting projects guided by scientists and educators.
https://www.sciencesocieties.org/publications/csa-news/2025/may/drawing-writing-and-painting-with-soils

8. Wild Pigment Project – Jackie Yeomans, Soil Guardian
   - Artist portfolio using exclusively soils, clays, and earth pigments.
https://wildpigmentproject.org/jackie-yeomans-soil-guardian-2

9. Heather Bird Harris – Earth Pigment Art
   - Interview and art examples using site-specific soil pigments for both paint and ink.
https://creativefuel.substack.com/p/earth-pigment-art-heather-bird-harris-interview

10. Further discussion
https://thisispublicparking.com/posts/a-brief-exposition-of-soil-in-recent-contemporary-art