GUARDIANS OF THE LANDSCAPE, ABOVE AND BELOW GROUND – FOCUS ON SOIL

Feedback form link & QR code:
https://ecolise.eu/curiosoil-lesson-plan-form-LB

Subject: **Ethics**
Duration: 45 minutes. Please note that the designated times are only indications and are very tight, they do not allow for longer discussions.
Age group: 14-16 years
Topic: Our Ethical Responsibility to Soil: Guardians of the Landscape, above and below ground

Connection to CURIOSOIL tools:

- SLAF, notably to VALUES
- Soil Curiosity Kit will eventually offer activities that deal directly and indirectly with ethics and soil, including this kind of discussion.

LEARNING OUTCOMES

Knowledge:
- Understand how soil hosts life and supports ecosystems and what that implies in ethical terms and the ethical dimensions of soil conservation
- Recognize soil as a non-renewable, precious resource requiring moral consideration
- Identify how societal systems and personal choices impact soil health globally

Skills:
- Develop critical thinking about environmental ethics
- Practice collaborative problem-solving
- Apply ethical reasoning to real-world scenarios

Competences:
- Environmental citizenship and responsibility
- Ethical decision-making in sustainability contexts
- Communication of complex moral concepts

LEARNING OBJECTIVES ALIGNED WITH SOIL COMPETENCE AREAS

1. Soil life and functions
Indicators: Students can explain why soil deserves ethical consideration, based on the fact that it is a living system which hosts the “Soil Food Web”
Descriptors: Students describe soil as a living system and articulate its role in supporting other ecosystems, its implications for food security and ecosystem health as foundational to ethical arguments for its protection

2. Soil diversity
Indicators: Students recognize soil as a common good, essential to the wellbeing of human societies and with deep connections to culture. Students identify the moral implications of soil biodiversity loss and soil degradation.
Descriptors: Students connect soil diversity to concepts of justice, rights of future generations, and intrinsic value of natural systems.

3. Soil threats

Indicators: Students identify ethical dimensions of soil degradation
Descriptors: Students analyse how soil threats raise questions about intergenerational justice, global equity, and moral responsibility

4. Soil solutions
Indicators: Students propose ethically grounded soil conservation actions
Descriptors: Students identify different threats and opportunities related to soil health and develop personal and collective action plans based on ethical principles of stewardship, justice, and care

---

LESSON STRUCTURE

Activity 1: Soil Care circle (10 minutes)

Description: Students form a circle and participate in a guided discussion exploring their relationship with soil through ethical lenses.

Materials:
- Small handful of local soil in clear containers (one per student)
- Magnifying glasses (optional)
- Soil Ethics Question Cards (ANNEX 1)
- Sticky notes

Setup instructions:
Arrange chairs in a circle. Place soil samples in the centre. Prepare question cards.

Step-by-step process:
1. Each student takes a soil sample and observes it for a minute. Multimedia resources (video, sound, images) of the Curiosity Kit can also be used.
2. Teacher poses opening question: "What ethical relationship do we have with this soil?"
3. Students pass around question cards, each reading one aloud
4. Brief discussion after each question (30 seconds per student response)
5. Conclude with students stating one word describing their ethical feeling toward soil

Recording:
Students write their one-word ethical response on a sticky note

Follow-up documentation:
Create a "Soil Ethics Word Cloud" on the board

Syllabus content reference:
Environmental ethics, moral responsibility, stewardship concepts

Activity 2: The soil dilemma theatre (15 minutes)

Description: Students perform short role-plays depicting ethical dilemmas related to soil use, developing empathy and understanding of different perspectives.

Materials:
- Scenario cards with soil-related ethical trade-offs and dilemmas (ANNEX 2)
- Simple props (hats, signs, or name tags for roles)
- Timer

Setup instructions:
Divide class into groups of 4-5. Each group receives a different scenario card with roles assigned (farmer, environmental scientist, local community member, future generation representative, etc.).

Step-by-step process:
1. Groups receive scenario cards (2 minutes to read and assign roles)
2. 5 minutes preparation time for mini performances
3. Each group performs their 2-minute ethical dilemma scene
4. After each performance, audience suggests ethical solutions
5. Groups vote on most compelling ethical argument presented

Recording:
Each group writes their chosen ethical solution on flip chart paper

Follow-up documentation:
Display ethical solutions around the classroom

Syllabus content reference:
Applied ethics, stakeholder perspectives, moral reasoning

Activity 3: Soil Solutions Pledge Tree (12 minutes)

Description: Students create a collaborative "Pledge Tree" where they commit to specific, positive actions for soil protection based on ethical principles.

Materials:
- Large paper tree outline on wall/board
- Coloured paper leaves (cut-out shapes)
- Markers/pens
- Tape or glue sticks

Setup instructions:
Mount large tree outline on wall. Prepare coloured paper leaves. Set up stations with writing materials.

Step-by-step process:
1. Students reflect on personal actions they can take for soil protection (ANNEX 3)
2. Each student writes one specific, achievable commitment on a paper leaf
3. Students share their pledge with a partner and explain the ethical reasoning
4. Students attach leaves to the tree, creating a visual commitment display
5. Class reads aloud selected pledges for inspiration

Recording:
Individual pledges written on leaves

Follow-up documentation:
Photograph completed Pledge Tree for future reference

Syllabus content reference: Personal ethics, environmental action, moral commitment

Activity 4: Soil Guardians reflection (8 minutes)

Description: Students complete a reflective writing exercise connecting their learning to personal values and future actions.

Materials:
- Reflection worksheets
- Pens
- Soft background music (optional)

Setup instructions:
Distribute reflection worksheets. Dim lights slightly and play gentle instrumental music to create contemplative atmosphere.

Step-by-step process:
1. Students complete guided reflection worksheet
2. Partner sharing of one key insight
3. Class closing circle – each student shares one word describing how they feel as "Soil Guardians"

Recording:
Completed reflection worksheets

Follow-up documentation: Students keep worksheets in ethics portfolios

Syllabus content reference: Moral development, personal responsibility, environmental stewardship

---

ASSESSMENT

Formative assessment:
- Observation of participation in discussions and role-plays
- Quality of ethical reasoning demonstrated in activities
- Peer feedback during partner sharing sessions

Summative assessment:
- Reflection worksheet responses showing understanding of soil ethics
- Creativity and feasibility of personal pledges
- Demonstration of ethical vocabulary and concepts in discussions

DIFFERENTIATION STRATEGIES

For advanced learners:
- Provide additional ethical frameworks (deontological, consequentialist, virtue ethics) to analyse soil issues
- Assign leadership roles in group activities
- Encourage connections to other environmental justice issues

For struggling learners:
- Provide sentence starters for discussions and written work
- Offer visual aids showing soil's importance
- Allow verbal responses instead of written for some activities

For students whose first language is not the language of instruction:
- Provide key vocabulary list with translations
- Encourage use of native language in initial brainstorming
- Pair with bilingual peers for support

EXTENSION ACTIVITIES

Immediate extensions:

- Create a class "Soil Ethics Charter" combining all insights
- Design posters promoting ethical soil treatment
- Research and present on indigenous soil stewardship practices

Home learning:

- Interview family members about their relationship with soil
- Document personal soil protection actions for one week
- Write a letter to a local politician about soil conservation ethics

Health and safety considerations:

- Ensure soil samples are from safe, uncontaminated sources. Make sure the samples are NOT from protected areas, and you have asked for permission from the owner of the land.
- Provide hand sanitizer after handling soil
- Check for any allergies to soil or plant materials
- Maintain clear pathways during movement activities

SOIL ETHICS QUESTION CARDS

Instructions for teachers: Print these cards on cardstock and cut them out. Use 8–10 cards for a class of 25–30 students. Each card contains a thought-provoking question to stimulate ethical discussion about soil.

CARD 1
Do we have a moral duty to protect soil for future generations?

Think about: What do we owe children not yet born? Is it fair for us to use up soil resources that took thousands of years to form?

CARD 2
Does soil have rights, just like humans and animals do?

Think about: What makes something deserving of rights? To which degree should we care for soil just because it is full of life (intrinsic value of life)? Or should we care for soil because it is a common good?

CARD 3
Is it ethical to grow food using methods that damage soil if it feeds hungry people today?

Think about: How do we balance immediate human needs with long-term environmental protection?

CARD 4
Who is responsible when soil is destroyed – the mining company, the individual farmer, the government, or society as a whole?

Think about: Where does moral responsibility lie when environmental damage occurs?

CARD 5
Is it fair that wealthy countries import their food from poorer countries, and that market pressure often results in intensive, large scale agricultural systems with unfair work conditions and lower environmental standards which damage those countries' soil?

Think about: Global justice, environmental colonialism, and fair trade in food systems.

CARD 6
Should we eat less of the foods that damages soil in order to protect soil, even if we enjoy those products or they are economically profitable? Which foods do you think are damaging soil and in which way?

Think about: Personal freedom versus environmental responsibility. When should individual choices be guided by environmental ethics?

CARD 7
Is it wrong to build houses and roads on fertile farmland when people need homes?

Think about: Competing human needs – housing versus food production. How do we make ethical choices about land use?

CARD 8
Do we have the right to use chemicals on soil if we don't fully understand their long-term effects?

Think about: The precautionary principle, scientific uncertainty, and moral decision-making under risk.

CARD 9
Should wealthy people pay more to protect soil since they consume more resources?

Think about: Environmental justice, economic inequality, and responsibility based on consumption patterns.

CARD 10
Is it ethical to patent seeds and control what farmers can grow in their own soil?

Think about: Corporate control over nature, farmer rights, and the ethics of owning biological resources.

CARD 11
What do we owe to the earthworms, bacteria, and other creatures that live in soil?

Think about: The moral status of soil organisms, biodiversity ethics, and our relationship with invisible life.

CARD 12
Should schools be required to teach about soil protection, just like they teach about recycling?

Think about: Educational responsibility, environmental literacy, and preparing citizens for environmental challenges.

CARD 13
Is it wrong to waste food when we know that food production damages soil?

Think about: Personal responsibility, the ethics of waste, and the hidden environmental costs of our daily choices.

CARD 14
Do urban people have the same responsibility to protect soil as rural people who live closer to farmland?

Think about: Geographic location and moral responsibility, urban-rural connections, and environmental citizenship.

CARD 15
Should we use technology to create artificial soil, or focus on protecting natural soil?

Think about: Technology versus nature, innovation versus conservation, and the ethics of replacing natural systems.

CARD 16
Is it ethical to buy cheap food if we know it was grown using methods that harm soil?

Think about: Consumer responsibility, economic pressures, and the moral dimensions of purchasing decisions.

CARD 17
What would you tell a farmer who says, "I need to feed my family today – I can't worry about soil in 50 years"?

Think about: Immediate survival versus long-term sustainability, empathy for difficult economic situations, and practical ethics.

CARD 18
Should there be an international law protecting soil, similar to laws protecting endangered species?

Think about: Global governance, environmental law, and whether soil deserves legal protection.

CARD 19
Is it fair to ask poor countries to protect their soil if rich countries damaged theirs during industrialization?

Think about: Historical responsibility, global equity, and fair burden-sharing in environmental protection.

CARD 20
Do we have an ethical obligation to restore damaged soil, even if it's expensive and takes decades?

Think about: Moral repair, environmental restoration, and long-term thinking in ethics.

TEACHER GUIDANCE FOR USING THE CARDS:

Discussion tips:
- Allow 30–45 seconds for initial student responses
- Encourage students to explain their reasoning
- Ask follow-up questions like "What would someone who disagrees say?"
- Connect responses to broader ethical principles (justice, care, rights, responsibility)

Adaptation ideas:
- For younger students: Choose simpler cards (#1, #2, #6, #13)
- For advanced students: Combine multiple cards for complex scenarios
- For debate format: Use opposing cards to create structured arguments

Cultural sensitivity:
- Be aware that agricultural practices vary by region
- Encourage students to share knowledge from their own cultural backgrounds
- Avoid judgmental language about different farming traditions

SOIL DILEMMA THEATRE SCENARIO CARDS

Instructions for teachers: Print these scenario cards on different coloured paper and cut them out. Each card contains a complete scenario with assigned roles. Groups of 4–5 students perform 2-minute scenes exploring these ethical dilemmas.

SCENARIO CARD 1: THE HUNGRY VILLAGE
Setting: A small farming village in Eastern Europe facing food shortages

The Dilemma: The village's soil is becoming less fertile each year due to intensive farming, but people are hungry now and need immediate food production.

ROLES:
- Village mayor: Wants to feed people immediately, suggests using more fertilizers
- Environmental scientist: Warns that intensive farming will destroy soil permanently
- Elderly farmer: Has seen soil quality decline over 40 years, worried about grandchildren
- Young parent: Has hungry children, needs food this year, can't wait for long-term solutions
- Future generation representative: Speaks for children not yet born who will inherit damaged land

Key question: Should the village prioritize immediate food needs or long-term soil health?

SCENARIO CARD 2: THE DEVELOPMENT DECISION
Setting: A town council meeting about a proposed shopping mall

The Dilemma: A major corporation wants to build a shopping mall on the town's most fertile farmland, promising 500 jobs and tax revenue.

ROLES:
- Town council leader: Wants economic development and jobs for unemployed residents
- Local farmer: Owns the fertile land, needs money but loves farming
- Environmental activist: Argues fertile soil should never be paved over
- Unemployed worker: Desperately needs a job, supports the mall development
- School student: Worried about food security and climate change for their generation

Key question: Is economic development worth sacrificing fertile agricultural land?

SCENARIO CARD 3: THE CHEMICAL CHOICE
Setting: A family farm facing a pest outbreak that threatens their crops

The Dilemma: A new pesticide will save this year's harvest but may harm soil organisms and contaminate groundwater.

ROLES:
- Farm owner: Facing financial ruin if crops fail, considering pesticide use
- Soil scientist: Explains how chemicals harm beneficial soil bacteria and earthworms
- Neighbour: Worried about water contamination affecting their family's health
- Agricultural advisor: Recommends profitable but potentially harmful farming methods
- Organic farmer: Shares experiences with chemical-free alternatives that take time to work

Key question: Should farmers use chemicals that harm soil to save their immediate livelihood?

SCENARIO CARD 4: THE GLOBAL FOOD TRADE
Setting: International trade negotiation meeting

The Dilemma: A wealthy European country wants to import cheap food from a developing nation, but the farming methods damage the exporting country's soil.

ROLES:
- European trade representative: Wants cheap food imports to keep prices low for consumers
- Developing nation farmer: Needs income but farming methods are destroying local soil
- Environmental justice advocate: Argues wealthy countries exploit poorer nations' resources
- European consumer: Wants affordable food, doesn't understand environmental costs
- International soil expert: Explains how global trade patterns contribute to soil degradation

Key question: Is it ethical for wealthy countries to import food produced through soil-damaging methods?

SCENARIO CARD 5: THE CLIMATE CONFLICT
Setting: A university research meeting about climate change solutions

The Dilemma: Scientists debate whether to focus on protecting existing soil or developing artificial alternatives as climate change worsens.

ROLES:
- Traditional ecologist: Believes protecting natural soil should be the priority
- Technology researcher: Argues artificial soil could feed people faster than restoration
- Indigenous knowledge keeper: Shares traditional soil care practices from ancestors
- Climate change refugee: Represents people fleeing areas where soil has been destroyed
- University funding committee: Must decide where to invest limited research money

Key question: Should we invest in protecting natural soil or developing technological alternatives?

SCENARIO CARD 6: THE SEED MONOPOLY
Setting: A courtroom where a farmer is being sued for saving seeds

The Dilemma: A large corporation claims a farmer violated their patent by saving seeds from plants grown in his own soil.

ROLES:
- Corporate lawyer: Argues the company invested in developing seeds and deserves profits
- Small farmer: Believes farmers have always had the right to save seeds from their land
- Judge: Must decide between corporate rights and traditional farming practices
- Consumer advocate: Worried about food prices if farmers can't save seeds
- Agricultural historian: Explains how seed-saving has been essential for soil adaptation

Key question: Who has the right to control what grows in soil – corporations or farmers?

SCENARIO CARD 7: THE MEAT DILEMMA
Setting: A family dinner discussion about changing their diet

The Dilemma: The family learns that livestock farming uses much more land and damages soil more than plant farming, but they love eating meat.

ROLES:
- Environmentally conscious teenager: Wants the family to become vegetarian
- Traditional grandparent: Believes meat is essential for health and culture
- Working parent: Worried about cost and time of changing family meals
- Local cattle rancher: Argues that well-managed grazing actually helps soil
- Nutritionist: Explains health impacts of different dietary choices

Key question: Do families have an ethical obligation to reduce meat consumption to protect soil?

SCENARIO CARD 8: THE URBAN GARDEN
Setting: A city neighbourhood meeting about a vacant lot

The Dilemma: Residents want to create a community garden on contaminated urban soil, but cleanup is expensive and time-consuming.

ROLES:
- Community organizer: Wants fresh food access for low-income neighbourhood
- Soil remediation expert: Explains the dangers of contaminated soil and cleanup costs
- City council member: Has limited budget for environmental projects
- Local parent: Wants children to learn about growing food but fears soil contamination
- Environmental justice activist: Argues poor neighbourhoods deserve clean soil like wealthy areas

Key question: Should communities accept contaminated soil or demand expensive cleanup for environmental justice?

SCENARIO CARD 9: THE INHERITANCE DIVIDE
Setting: A family meeting about inheriting a farm

The Dilemma: Siblings must decide whether to continue sustainable farming (low profit) or lease land for intensive agriculture (high profit but soil damage).

ROLES:
- Eldest sibling: Wants to honour parents' sustainable farming legacy
- Business-minded sibling: Needs money from the land to pay for children's education
- Environmentalist sibling: Believes the land should be protected regardless of profit
- Local agricultural advisor: Recommends intensive farming for maximum profit
- Family friend/lawyer: Tries to help family find compromise solution

Key question: Should families prioritize financial needs or environmental stewardship when inheriting land?

SCENARIO CARD 10: THE SCHOOL LUNCH PROGRAM
Setting: A school board meeting about the cafeteria food program

The Dilemma: The school can buy cheap food grown with soil-damaging methods, or expensive organic food that protects soil but strains the budget.

ROLES:
- School head: Wants to provide healthy food but has limited budget
- Parent representative: Demands organic food for children's health
- School board treasurer: Worried about budget cuts to other programmes
- Student environmental club leader: Wants school to set example for soil protection
- Local organic farmer: Explains challenges of soil-friendly farming and higher costs

Key question: Should schools spend more money on environmentally responsible food, even if it means cutting other programs?

TEACHER GUIDANCE FOR SCENARIO CARDS:

Performance tips:
- Give groups 5 minutes to read and discuss their scenario
- Encourage students to really "become" their character
- Remind students that there may be no perfect solution – ethical dilemmas are complex
- Ask audiences to suggest creative compromises after each performance

Discussion questions after each scene:
- What values were in conflict in this scenario?
- Which character's argument was most convincing and why?
- How could this dilemma be resolved in a way that considers everyone's needs?
- What would you do if you were in this situation?

Assessment focus:
- Students demonstrate understanding of multiple perspectives
- Students can identify the ethical principles at stake
- Students propose thoughtful solutions that consider various stakeholders
- Students show empathy for different viewpoints

Extension ideas:
- Have students write alternative endings to scenarios
- Create new scenarios based on local soil issues
- Research real-world examples of similar dilemmas
- Invite local farmers or environmental experts to respond to student performances

SOIL SOLUTIONS PLEDGE TREE: PROMPT QUESTIONS

Instructions for teachers: Use these prompts to help students develop meaningful, personal pledges for soil protection. Students can choose questions that resonate with them or work through categories systematically.

PERSONAL LIFESTYLE PLEDGES

Food choices:
- What is one change I can make to my eating habits that would help protect soil?
- How can I reduce food waste in my daily life?
- What locally grown foods can I choose more often?
- How can I learn more about where my food comes from and how it's grown?
- What is one meat-free meal I could try each week to reduce pressure on soil?

Consumer decisions:
- How can I support businesses that care about soil health?
- What questions can I ask when shopping to learn about soil-friendly products?
- How can I choose quality over quantity in my purchases?
- What is one way I can reduce my overall consumption to help the environment?
- How can I research companies' environmental practices before buying their products?

Home and garden:
- What can I do in my family's garden or balcony to protect soil?
- How can I start composting food scraps at home?
- What natural alternatives can I use instead of chemical fertilizers or pesticides?
- How can I create habitat for soil-supporting creatures like earthworms?
- What is one way I can reduce chemical runoff from my home?

LEARNING AND EDUCATION PLEDGES

Knowledge building:
- What is one new thing I want to learn about soil this month?
- How can I share what I've learned about soil with my family or friends?
- What documentary, book, or website about soil will I explore?
- How can I connect soil health to other subjects I'm studying?
- What local soil expert or farmer could I interview or learn from?

School and community:
- How can I bring soil awareness to my school or youth group?
- What is one way I can involve my friends in soil protection?
- How can I start conversations about soil ethics with people I know?
- What presentation or project about soil could I create for others?
- How can I connect soil protection to other causes I care about?

ACTION AND ADVOCACY PLEDGES

Direct action:
- What is one hands-on activity I can do to help soil in my community?
- How can I participate in local environmental clean-up or restoration projects?
- What community garden or urban farming project can I support?
- How can I help remove invasive plants that damage soil?
- What is one way I can reduce erosion or soil damage in my area?

Advocacy and influence:
- How can I encourage my school to adopt more soil-friendly practices?
- What letter can I write to a local politician about soil protection?
- How can I use social media to raise awareness about soil issues?
- What petition or campaign for soil protection can I support?
- How can I influence my family's purchasing decisions to support soil health?

CREATIVE AND INNOVATIVE PLEDGES

Artistic expression:
- How can I use art, music, or writing to celebrate soil?
- What creative project can I make to show others why soil matters?
- How can I document the soil in my local area through photography or art?
- What story or poem can I write about soil protection?
- How can I design something that helps people connect with soil?

Innovation and problem-solving:
- What simple invention or solution for soil protection can I research or develop?
- How can I experiment with natural ways to improve soil health?
- What app, website, or tool could help people make soil-friendly choices?
- How can I design a better system for composting or soil care?
- What is one way I can combine technology with soil protection?

RELATIONSHIP AND COMMUNITY PLEDGES

Family connections:
- How can I involve my family in soil protection activities?
- What conversation about soil ethics can I start at home?
- How can I learn about my family's or ancestors' relationship with land?
- What family tradition related to gardening or farming can I continue or start?
- How can I teach younger family members about soil?

Community building:
- How can I connect with others who care about soil in my area?
- What group or organization focused on soil or environmental protection can I join?
- How can I organize a soil-focused event or activity with friends?
- What is one way I can help my neighbours make soil-friendly choices?
- How can I build bridges between different groups who care about land?

LONG-TERM COMMITMENT PLEDGES

Future planning:
- What career path might allow me to protect soil professionally?
- How can I ensure soil protection remains important to me as I get older?
- What skills do I want to develop to become a better soil steward?
- How can I influence the next generation to care about soil?
- What legacy do I want to leave regarding environmental protection?

Systemic change:

- How can I support policies that protect soil at local, national, or global levels?
- What is one way I can work toward changing harmful systems?
- How can I support farmers who use soil-friendly methods?
- What economic choices can I make that support soil health?
- How can I advocate for soil education in schools?

REFLECTION PROMPTS FOR PLEDGE DEVELOPMENT:

Personal connection:
- What aspect of soil protection feels most important to me personally?
- What skills or resources do I already have that could help soil?
- What barriers might prevent me from helping soil, and how can I overcome them?
- How does protecting soil connect to other values I hold?

Realistic goal setting:
- What is one small step I can take this week?
- What is something I can do regularly, like once a month?
- What seasonal activities could I commit to?
- How can I make my pledge specific and measurable?

Impact consideration:
- How might my individual action inspire others?
- What ripple effects could my pledge have in my community?
- How does my pledge address both immediate and long-term soil needs?
- What combination of personal change and collective action makes sense?

SAMPLE PLEDGE STARTERS (For students who need more structure):

- "I pledge to..."
- "Every week, I will..."
- "I commit to learning..."
- "I will share..."
- "I promise to..."
- "By the end of this month, I will..."
- "I will advocate for..."
- "I will reduce..."
- "I will support..."
- "I will create..."

Encourage students to:
- Make pledges specific and actionable
- Choose something they genuinely care about
- Consider both individual and collective impact
- Think about how their pledge reflects their personal values
- Be realistic about what they can accomplish
- Include a timeline when appropriate
- Consider how they'll know if they've succeeded

Teacher reminder: Emphasize that pledges should be positive, solution-focused, and personally meaningful rather than prescriptive or guilt-inducing.

ETHICAL SOIL GUARDIANS' REFLECTION WORKSHEET

PART 1: CONNECTING WITH SOIL

1. At the beginning of class, how did you feel about soil? Circle one and explain:

Indifferent – Curious – Concerned – Connected – Other: _____

Explain your feeling:
_____
_____

2. What is one thing about soil that surprised you during today's lesson?
_____
_____

3. Complete this sentence: "Soil is important because..."
_____
_____
_____

PART 2: ETHICAL THINKING

4. What does it mean to have an "ethical relationship" with soil?
_____
_____
_____

5. From the role-play activities, which character's perspective did you find most convincing? Why?

Character: _____

Why their perspective was convincing:
_____
_____
_____

6. What is one ethical principle (like fairness, responsibility, or care) that you think should guide how we treat soil?

Principle: _____

How it applies to soil:
_____
_____

PART 3: PERSONAL RESPONSIBILITY

7. Circle the statement that best describes your current feelings about personal responsibility for soil:

a) I don't think individuals can make much difference
b) I want to help but don't know how
c) I feel responsible, but it seems overwhelming
d) I feel motivated to take action
e) I already try to protect soil in my daily life

Explain your choice:
_____
_____

8. What is one barrier that might prevent you from protecting soil? How could you overcome it?

Barrier: _____

How to overcome it:
_____
_____

9. What is one way your daily choices already affect soil (positively or negatively)?
_____
_____

PART 4: LOOKING FORWARD

10. Your pledge for the Soil Solutions Tree was:
_____
_____

Why did you choose this specific pledge?
_____
_____

11. How will you remember to follow through on your pledge?
_____
_____

12. What is one way you could encourage others to care about soil?
_____
_____

PART 5: DEEPER REFLECTION

13. How do you think future generations will judge our treatment of soil? What would you want them to know about your generation's efforts?
_____
_____
_____

_____

14. If soil could speak, what do you think it would say to humans?
_____
_____
_____

15. Complete this sentence: "Being a soil guardian means..."
_____
_____
_____

PART 6: CONNECTIONS

16. How does caring about soil connect to other values or issues you care about?
_____
_____
_____

17. What is one question about soil ethics that you still have after today's lesson?
_____
_____

18. How has your relationship with soil changed during this lesson?

Before: _____

After: _____

What caused this change:
_____
_____

PART 7: CLOSING REFLECTION

19. Draw or write about what being a "soil guardian" looks like to you:

[Large empty box for drawing/writing]

20. One word that describes how you feel about soil now:

MY WORD: _____

Why this word:
_____
_____

TEACHER NOTES:

Assessment focus:
- Look for evidence of ethical reasoning and personal connection
- Note students' ability to connect individual actions to broader impact
- Observe development of environmental citizenship concepts
- Check for understanding of multiple perspectives on soil issues

Follow-up options:
- Use responses to plan future lessons
- Share anonymous excerpts to inspire class discussion
- Create class summary of common themes
- Connect to portfolio assessment or ongoing projects

Time saving tips:
- Students can complete sections 1-3 during main lesson
- Sections 4-7 work well as quiet reflection time
- Can be adapted for homework completion
- Consider having students complete digitally for easy storage

---

ETHICAL FRAMEWORKS FOR SOIL ANALYSIS
Teacher information sheet

For use with advanced learners or extension activities

OVERVIEW

These three major ethical frameworks provide different lenses for analyzing soil-related moral dilemmas. Each framework asks different questions and can lead to different conclusions about the same situation. Understanding these approaches helps students develop more sophisticated ethical reasoning about environmental issues.

---

1. DEONTOLOGICAL ETHICS (DUTY-BASED)

Key principle:
Actions are right or wrong based on whether they follow moral rules or duties, regardless of consequences.

Core question:
"What is our duty regarding soil?"

Applied to soil issues:
- Duty to future generations: We have an absolute obligation to preserve soil for those not yet born
- Duty of stewardship: Humans have a moral duty to care for the natural world
- Duty of justice: We must treat all people fairly regarding access to fertile soil
- Duty of truth: We must be honest about soil degradation and its causes

Example analysis:

Scenario: A farmer must choose between using chemicals to save this year's crop or protecting soil health.

Deontological approach: "If we have a duty to preserve soil for future generations, then using harmful chemicals is wrong regardless of immediate benefits. Our duty is to act according to principles we could want everyone to follow."

Student discussion questions:
- What duties do we have toward soil that cannot be broken?
- Should these duties apply equally to all people, everywhere?
- How do we decide when duties conflict (feeding people vs. preserving soil)?

Key philosophers: Immanuel Kant, W. D. Ross

---

2. CONSEQUENTIALIST ETHICS (OUTCOME-BASED)

Key principle:
Actions are right or wrong based solely on their outcomes or consequences.

Core question:
"What soil protection actions will produce the best overall results?"

Applied to soil issues:
- Greatest good: Actions that protect soil for the greatest number of people are morally right
- Cost-benefit analysis: We should choose soil policies that maximize benefits and minimize harms
- Utilitarian calculation: The right choice produces the most happiness/wellbeing overall
- Long-term vs. short-term: We must weigh immediate needs against future consequences

Example analysis:
Scenario: A government must choose between supporting intensive agriculture (immediate food security) or sustainable farming (long-term soil health).

Consequentialist approach: "We should calculate which option produces the best outcomes for the most people over time. If sustainable farming prevents famine in 50 years, it may be worth short-term food shortages now."

Student discussion questions:
- How do we measure and compare different types of consequences?
- Should we prioritize immediate human needs or long-term environmental health?
- How do we account for consequences we can't predict?

Key philosophers: Jeremy Bentham, John Stuart Mill, Peter Singer

---

3. VIRTUE ETHICS (CHARACTER-BASED)

Key principle:
Actions are right or wrong based on whether they reflect good character traits (virtues) or bad ones (vices).

Core question:

"What kind of person should I be in relation to soil?"

Applied to soil issues:
- Virtue of temperance: Moderation in resource use, avoiding excess consumption
- Virtue of prudence: Wisdom in making decisions about soil management
- Virtue of justice: Fairness in how soil resources are shared and protected
- Virtue of compassion: Care for soil life and future generations
- Virtue of courage: Standing up for soil protection even when it's difficult

Example analysis:
Scenario: A consumer must choose between cheap food (possibly produced harmfully) and expensive organic food.

Virtue ethics approach: "A virtuous person would be temperate (not wasteful), prudent (considering long-term effects), and just (supporting fair farming practices). The right choice reflects the character traits we want to develop."

Student discussion questions:
- What character traits should guide our relationship with soil?
- How can caring for soil help us become better people?
- What would a "virtuous soil guardian" look like?

Key philosophers: Aristotle, Alasdair MacIntyre, Rosalind Hursthouse

---

COMPARING THE FRAMEWORKS

Soil dilemma example: Should a city build affordable housing on fertile farmland?

Framework	Focus	Key Question	Likely Conclusion
Deontological	Moral duties	"What is our duty to preserve farmland?"	Probably oppose development (duty to preserve soil)
Consequentialist	Outcomes	"Which choice produces the best overall results?"	Depends on calculation of benefits vs. harms
Virtue Ethics	Character	"What would a virtuous community do?"	Focus on balanced, wise decision-making process

---

TEACHING STRATEGIES

For advanced students:
1. Framework rotation: Have students analyse the same soil scenario using all three frameworks
2. Debate format: Assign different frameworks to different teams
3. Case study analysis: Apply frameworks to real-world soil controversies
4. Philosophical dialogue: Students role-play as philosophers debating soil issues

Discussion facilitation:
- Acknowledge complexity: These frameworks often lead to different conclusions
- Encourage synthesis: Students can combine insights from multiple frameworks

- Real-world application: Help students see how these frameworks appear in actual policy debates
- Personal reflection: Which framework resonates most with each student's values?

Assessment questions:
- How would each framework approach this soil dilemma?
- What are the strengths and limitations of each approach?
- Which framework do you find most convincing for environmental issues? Why?
- How might combining frameworks lead to better soil protection decisions?

COMMON STUDENT MISCONCEPTIONS

About Deontological ethics:
- Misconception: "Rules are always rigid and can't be broken"
- Reality: Rules can be complex and may require interpretation in specific situations

About Consequentialist ethics:
- Misconception: "Anything is okay if it produces good results"
- Reality: Consequences must be carefully calculated and fairly distributed

About Virtue ethics:
- Misconception: "It's just about being a good person"
- Reality: Virtues are specific character traits that require development and practice

---

EXTENSION ACTIVITIES

Research projects:
Students research how different ethical frameworks have been applied to environmental policy
Compare Indigenous ethical approaches to soil with Western philosophical frameworks
Analyse current soil protection laws through different ethical lenses

Creative applications:
Students create "ethical decision trees" for soil-related choices
Design campaigns that appeal to different ethical frameworks
Write letters to politicians using different ethical arguments

Cross-curricular connections:
History: How have different societies applied these ethics to land use?
Science: How do scientific facts interact with ethical frameworks?
Economics: How do economic theories relate to these ethical approaches?

TEACHER REFLECTION QUESTIONS

- Which framework do I personally find most compelling for environmental issues?
- How can I help students see the value in frameworks that don't match their initial preferences?
- What real-world soil issues in our local area could benefit from this ethical analysis?
- How can I encourage students to develop their own ethical framework for environmental decision-making?

Remember: The goal is not to find the "correct" framework, but to help students develop sophisticated ethical reasoning skills that they can apply to complex environmental challenges throughout their lives.