

EARLY CHILDHOOD EDUCATION

"YOUNG FOREST STEWARDS"

LESSON PLAN

Topic: Soil

Level #: Level 1

Ages: 3-5 Years

Learning Goals

Learning Goal:

Understand that the health of the forest depends on the health of the soil.

Investigative Question:

Dig into the soil. What makes up the forest's soil? What are the factors in healthy forest soil/composition.? What animals have dens in the ground?

Teaching Points

The forest soil is made up of minerals (dirt) composed of sand, clay, silt and small ground up rocks as well as composting materials like tree leaves, needles, branches/twigs (humus), water/moisture from rain, snow, frost, dew, etc., and air. Worms, grubs, ants, roots and animals play a role in the forest having healthy soil by keeping the soil loose, allowing air and water to flow through the dirt. Microorganisms help to compost all the decaying materials to make more soil. Spiders, mice and other animals often have dens in the soil. Soil is food for the whole forest and without good soil, nothing in the forest can be healthy.

Materials

For Students:

a.) Shovels

b.) Paper

c.) White Glue

d.)

e.)

f.)

g.)

h.)

i.)

For Teachers:

a.) Book 1 - Soil

b.) Glue Spreader

c.) Bucket for Soil

d.) Starter Trees

e.) Clear Plant Containers

f.) Soil for Potting

g.)

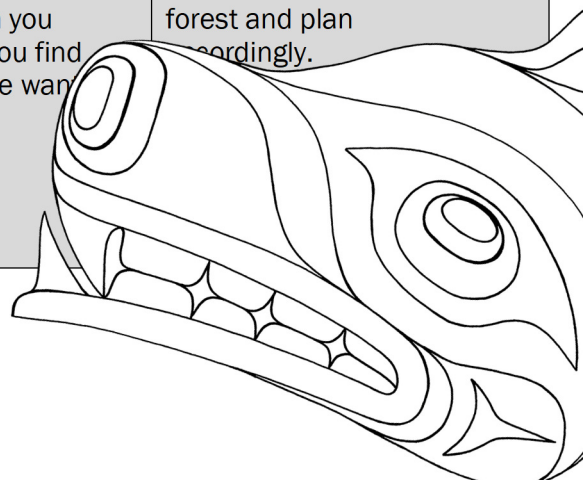
h.)

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Learning Experience

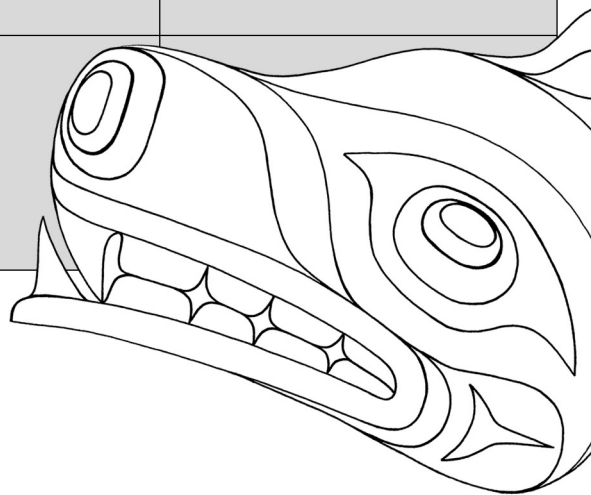
Experience (e.g., field trip, story, song)	Activity (e.g., game, art, scavenger hunt)	Location
Book	Point to and discuss the photos as is appropriate to age.	Classroom, outside, in the forest.
Art - Soil Painting	Child spreads glue on paper, and sprinkles dirt on glue. Let dry and shake off remaining soil. Can the child make forest shapes like trees or animals from the dirt? Can they write their name?	Classroom or outdoor activity.
Activity - grow a tree	<p>Grow a Hemlock tree in a clear container. Will need soil and Hemlock tree starter.</p> <p>Where could you grow starter trees that are later planted in the forest? How will it get water? Where will you plant it once it's too big for the container? Children will view the root system of the tree, learn to care for the tree and bring it to forest once it's too big. Can touch/smell/see tree as it grows.</p>	
Activity - Soil exploration	Gather soil during a forest field trip. Once at home or in class, explore that soil. What do you see? What can you find? What does it feel like?	
Field trip or bring the forest to the classroom	Go to a local forest and explore what is under the grass, leaves, etc. Lie down on your tummy. Can you find roots that are out of the ground? What do you find in the soil? What does it smell like? Does anyone want to taste it? Bring some soil home for art.	Locate closest natural forest and plan accordingly.





Risk Management

Identified Risk (e.g., falling, animal encounters, bee stings, vehicle use, lost child)	Management Measures (e.g., buddy system, driver's/criminal record checks, first aid kits)	Planning/Responsibility (e.g., staff responsible for each part of the Risk Management Plan)
Forest time	Use the buddy system, ensure children know their exploration boundaries, have an extra adult to support needs such as bathroom breaks, carry a first aid kit, do not enter the forest if it is windy or if there is a concern of overhead objects falling.	Teacher
Animal encounters	Remain together, make a lot of noise and raise arms to make yourself large. Maintain eye contact with the animal and slowly, as a group, back away from the animal.	Teacher
Sharp objects in the soil	Sift through any soils brought to the classroom to ensure there are no sharp object.	Teacher
Forest time - footing, falling, eye hazards and prickles	Choose a relatively flat and level area for easy walking and not too many obstacles. Choose a darker area where there will be less underbrush which can snap back and hit walkers in the face or eyes. Avoid brushy areas with lots of prickles (salmonberry, trailing raspberry, devils club).	Teacher



Example Soil Painting

