

Additional titles
from **film ideas, Inc.**
in the



4-Part SERIES

DIRT:
Nature's Sandbox

TREES:
Nature's Coolers

PONDS:
Nature's Aquarium

CLOUDS:
Nature's Sprinklers



film ideas, Inc.

308 North Wolf Rd. Wheeling, IL 60090

TEL: 1-800-475-3456 or 847-419-0255

FAX: 847-419-8933 E-MAIL: filmid@ais.net

WEB SITE: www.filmideas.com

Copyright © 1999

film ideas, Inc.

Presents

DIRT

NATURE'S SANDBOX



**Naturally
Nature**
4-Part Series for *kids*

INSTRUCTIONAL GUIDE

INTRODUCTION TO SERIES

Naturally Nature is a fascinating 4-part series for young children carefully crafted to bridge the gap between a child's play and introductory science. By focusing upon the setting where children play and then gradually highlighting the underlying natural science, this introductory series completes an important next step in a child's introduction to social studies and science.

As a complementary device with each video, an instructional guide suggests exercises to help teachers, parents and students. These interactive exercises will reinforce and further develop a child's level of comprehension about the importance of nature and the joy of learning science.

The instructional guide provides:

Child-friendly **exercises!** ✓

Fun-to-do **follow-up activities!** ✓

Easy-to-learn **reinforcement lessons!** ✓

Permission granted to copy the exercises provided in this guide. For educational use ONLY.

If you were playing in the dirt what things would you possibly find? List those things on the solid black lines.



Reinforcement Lessons:

Lesson #1: Mixing water with dirt creates mud. Assign the children to bring a small amount of dirt into class. Then like the children in the video, have the class mix the dirt with a small amount of water to make mud. If possible use a microscope(s) and have the children view the dirt both before and after the mud was made.

Lesson #2: The video mentions many important roles dirt fulfills in the earth's environment. Discuss with the class what those roles are, (*i.e. provides nutrients to plants*) how they effect the natural nature of things, (*i.e. with the nutrients plants receive from dirt plants can grow*) and in return how dirt can effect us in our own lives. (*i.e. healthy dirt allows for healthy plants which in return supplies our human bodies with healthy food and clean air to breathe*).

Lesson #3: Healthy plants grow well in healthy soil. Ask the children to bring in plant seeds and soil. Have them plant one seed into a healthy pot of soil and another seed into a polluted (*i.e. add coke, paper, or other pollutants*) pot of soil. Then discuss with the class how important it is for plants to live in healthy soil and a pollution free environment. Explain to the children that throwing garbage into the trash can where it belongs promotes healthy soil, healthy plants and a healthy earth.



Most kids love dirt! They love to dig in it, build in it, explore in it and just plain get dirty in it. And while they play, kids notice that there is life in the dirt, that water and dirt mix to make mud, and that roots from plants and trees can be found burrowed under the soil. This imaginative video helps youngsters understand the real importance of dirt and begins a basic introduction to the natural nature of earth and the study of science.

Program Objectives

After viewing the program, children should understand:

- what dirt is & the role it plays in the natural nature of earth.
- the 3 different kinds of dirt.
- a working vocabulary (keywords) associated with dirt.
- why plants and animals need dirt.

Keywords:

Teacher's Note: Before assigning the following exercises discuss with the children these definitions for keywords:

- **Bacteria** - microscopic creatures found in the dirt which are so small you can only see them with a microscope
- **Dirt** - protects plants & animals from extreme heat & cold and supplies nutrients to the roots of plants which helps make them grow.
- **Earthworms** - wiggly creatures that loosen up soil so water can get through to plants and trees. They also bring minerals into the soil to help plants grow.
- **Erosion** - over time wind, water, heat and cold begin to break down small and large rocks at which point dirt begins to form.
- **Humus** - found in soil and is made up of decaying earthworms, insects, plants and animals.
- **Minerals** - provides nutrition for plants and animals.
- **Pollution** - garbage (i.e. coke can) found in dirt.

Follow-Up Activities:

- 1) Distribute or display the 3 different kinds of dirt; Sand, Clay and Silt . Then discuss with the children how each differs in texture, color and other characteristics. Also discuss how each kind of dirt can be used. (i.e. silt is best used to grow crops)
- 2) If possible, with the use of a microscope(s), have the children view the intimate components of dirt. Perhaps view the 3 different kinds of dirt; sand, clay and silt.
- 3) Explain to the children the rippling effects pollution has on dirt, water, vegetation and other parts of the environment. Then assemble the children to visit a local forest preserve, park or other public facility to organize a clean-up effort.
- 4) Like the children in the video, assemble the students to visit an area where they can explore and possibly dig and play (bring little shovels and buckets) in the dirt. What things did they discover? i.e. an old Indian arrowhead, roots, worms, rocks, old soda can, etc.

Exercise #4:

Ants are just one example of many creatures who make their homes in dirt. On the dotted black line write the word home to indicate which animals use dirt for their home.



BEETLE



ELEPHANT



EARTHWORM



TIGER

Exercise #1:

Circle the particles which make up dirt:

- metal, brown sugar, salt, flour, wood
- rocks, sand, leaves, twigs, water, parts of insects
- paper, plastic, steel, hair, glass, sugar

.....

Place an **X** in the box to indicate the 3 different kinds of dirt:

- Sand Clay Silt
- Cement Grass Plants
- Sawdust Dough Hay

.....

Circle the two main functions of dirt:

- 1) to protect plants & animals from extreme heat & cold.
- 2) to create an area where children can play.
- 3) to supply nutrients to the roots of plants so they can grow.

Exercise #2:

Over time wind, water, heat and cold cause small and large rocks to erode. Through this process dirt begins to form. On the solid black line provided below, write the **keyword** as illustrated in the video which describes this process.

Keywords:

- Dirt
- Earthworms
- Erosion
- Minerals
- Pollution



Exercise #3:

Below are the keywords and their definitions discussed in the video. Match the keyword with its definition by writing the number in the box. *Follow the Example Shown.* **Teacher's Note:** before circulating handouts for this exercise discuss the definitions for these keywords.

Keywords:

- example • erosion
- pollution
- earthworms
- dirt

Definitions

- 1) wiggly creatures that loosen up soil so water can get through to plants and trees. They also bring minerals into the soil to help plants grow.
- 2) over time wind, water, heat and cold begin to break down small and large rocks at which point dirt begins to form.
- 3) protects plants & animals from extreme heat & cold and supplies nutrients to the roots of plants which helps make them grow.
- 4) garbage (i.e. coke can) found in dirt.