



# Science Lessons

And worksheets for

**Food Forests and Edible Gardens**

# First Quarter Soil Sort Grades 1-5

## Standards and Pacing Guide:

### Science

Grade 1- 1<sup>st</sup> quarter, The Practice of Science SC1.N.1.1: Question, Investigate, Explain  
SC.1.N.1.2: Use Five Sense to Observe, Describe and Compare Objects  
2<sup>nd</sup> quarter, SC.1.E.6.1 Recognize Rocks and Soil  
3<sup>rd</sup> quarter, SC.1.L.14.3 Living and Nonliving Things

Grade 2-1<sup>st</sup> quarter, SC.2.E.6.2: How Soil Forms  
4<sup>th</sup> quarter, SC2.L.17.1 Compare and contrast Basic Needs of Plants and Animals

Grade 3- 1<sup>st</sup> quarter, The Practice of Science SC3.1.1: Question, Investigate, Explain  
SC.3.1.2 Compare Observations, Explain Differences

Grade 4- 1<sup>st</sup> quarter, The Practice of Science: SC.4.1.1 Question, Investigate, Explain  
SC.4.1.2 Compare Observations, Explain Differences, Earth Structures SC.4.E.6.3 Natural  
Resources

Grade 5 – 1<sup>st</sup> quarter, Earth in Space and Time SC.5.E.5.2: Planet Characteristics , Practice of  
Science SC.5.N.1.2 Compare Use of Experiment and other types of Investigation.

### Language Arts Informational Text:

L

LAFS.3.RI.1.1, Ask and answer questions to demonstrate understanding of key details in the  
texts.

LAFS.4.RI.1.1 Refer to details and examples in a text.....

LAFS.5.RI.1.1 Quote accurately from the text when explaining what the text says...

Resource: Growing Food, Linking Food and the Environment, Pages 189-193

# Soil Sort Grades 1-2

**Grades 1-2 Overview:** This lesson furthers students understanding of soil and plant/soil interactions. Through a hands-on investigation, students will compare, and gather data on the characteristics of healthy soil.

## **Materials for Grades 1-2:**

- Master 2.1A and 2.1B- one per group, Master 2.2 for each student
- pencils for sorting and writing,
- A small plastic magnifying glass – one per group
- Soil sample A - a container of fertile soil from an area where plants grow and Soil sample B - a container of soil from an area where no plants grow.

## **Procedure for Grades 1-2:**

- Place students in working groups of 2-3 students and give each group a magnifying glass.
- Before beginning the soil observation, review the categories of sorting
- Place several spoonfuls of the soil in the center of Master 2.1A
- Remind students that they will have to take turns sharing the magnifying glass and discuss their findings with each other.
- Repeat with soil sample B Master 2.1B
- Use the questions listed below to guide the soil observation and discussion
- Together complete Master 2.2

## **Questions for Observations:**

Do the soils look the same?

What is the difference in color?

How do the soils feel?

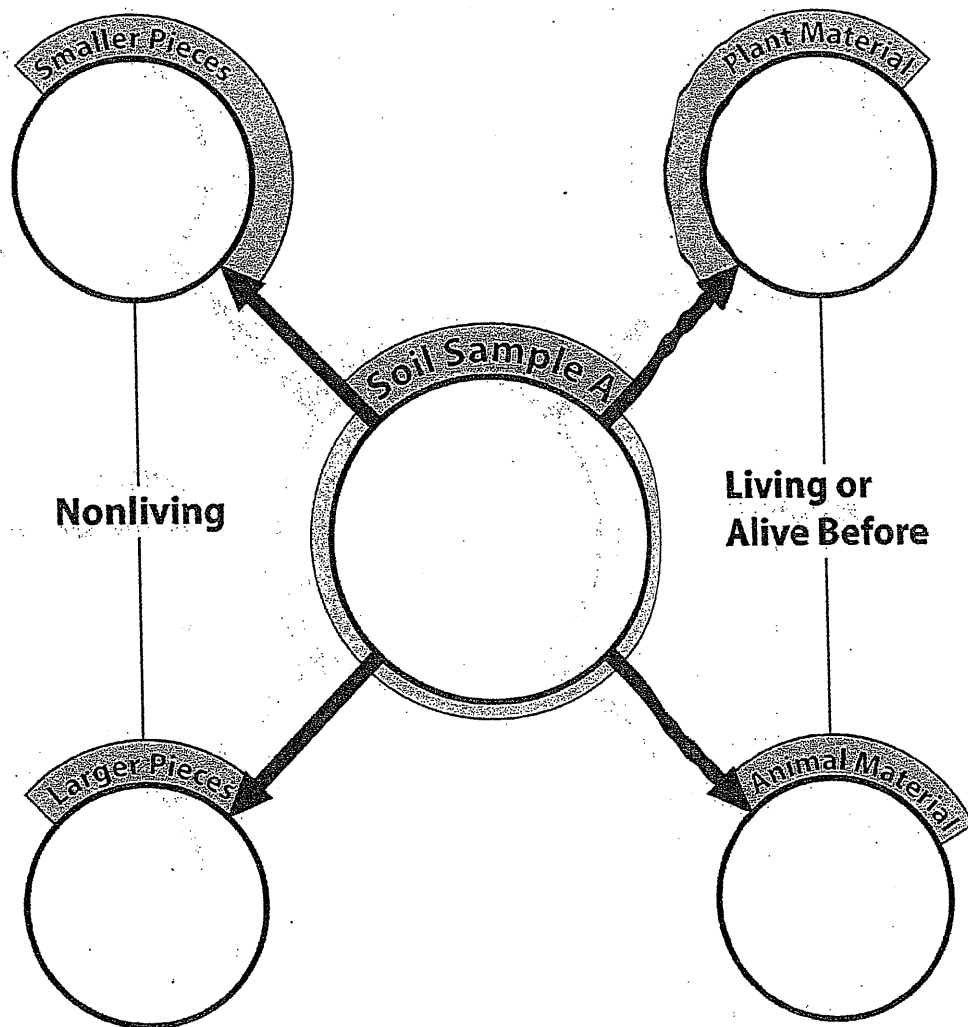
Which one has more rocks?

Do the soils smell the same or different?

Which soil is better for plants?

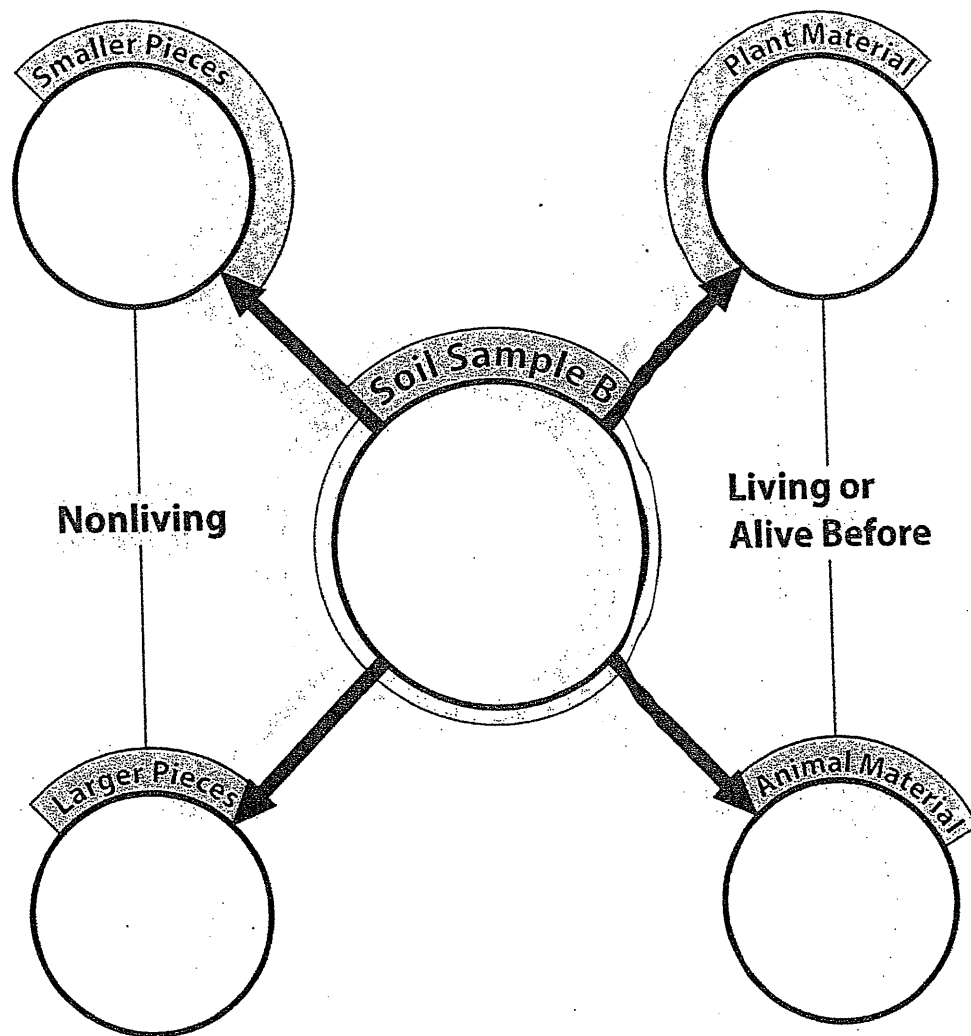
## MASTER 2.1A, INVESTIGATION 1: LOOKING AT SOIL SAMPLES

1. Put one spoonful of soil A the middle circle.
2. Use a hand lens and a pencil to sort the parts of the soil into different piles.



## MASTER 2.1B, INVESTIGATION 1: LOOKING AT SOIL SAMPLES

1. Put one spoonful of soil B the middle circle.
2. Use a hand lens and a pencil to sort the parts of the soil into different piles.





**Name** \_\_\_\_\_



**MASTER 2.2, INVESTIGATION 1:  
DRY SOIL**

**After you look at Soil A and Soil B,  
answer these questions.**

1. How is the soil sample A like soil sample B?
  
  
  
  
  
  
  
  
  
  
2. How is sample A different from sample B?
  
  
  
  
  
  
  
  
  
  
3. Do you think that plants will grow better in  
sample A or sample B? Why?