

Grade 3 Science

Lesson: 3-1

Unit: Soils in the Environment

Topic: Introduction

Lesson

- Provide table groups with picture showing soil use.
- Have each group use scrap paper to list all of the uses for soil that they can find in the picture.
- Have groups take turns supplying answers → record on chart paper
- Ask groups to add to their list any other uses for soil (not on the picture)
- Add new answers to chart paper.
- Give students a blank piece of paper and have them make a little page for the unit → include the word "Soil" and pictures showing soil use

Reminders

Supplies Needed

- Picture
- Chart Paper
- Blank Paper

Homework

Notes

Grade 3 Science

Lesson: 3.2

Unit: Soils
in the Environment

Topic: What is in Soil

Lesson

- Explain task to students
 - cover table with newspaper
 - pour soil out
 - sort into piles
 - record observations
 - Discuss appropriate behavior
 - no throwing
 - keep soil on paper
 - wash afterwards
 - Compost when done
 - Hand out worksheet
 - Students perform activity
 - Clean up at end ← leave lots of time
- * questions next to be answered
- Really messy
yucky.

Reminders

Supplies Needed

- Soil
- Newspaper
- toothpicks
- Magnifying glasses

Homework

Notes

Grade 3 Science

Lesson: 3-3

Unit: Soils in the Environment

Topic: How is soil made?

Lesson

- Have students take out papers
- Have student volunteers read each section of the page
- Talk about each section individually, relating it to findings from previous class
 - With humus : - Talk about students rubbing the brown "dirt" in their fingers
 - Ask them what part of ~~the~~ soil it is → humus
 - What is humus → decayed organisms
- Students fill in organizer at bottom of page
- Students then finish questions from previous lesson

Reminders

Supplies Needed

Homework

Notes

Grade 3 Science

Lesson: 3-4

Unit: Soils in the environment

Topic: How Soil is made

Lesson

- Hand out worksheets
- Instruct students to read through on their own
 - tell them there is a quiz on the back
 - inform them it is not ~~for~~ to be worked (so don't worry)
 - inform them that once they start quiz they are not to turn page back over
- Students read and do quiz
- Once students have struggled for a while, stop them and discuss the importance of taking their time when reading, and the importance of re-reading information to get a better understanding.
- Have students finish quiz by using front of page
- When done & students are to write quiz questions for their peers.
 - ↑
exchange when
done
- Take up answers at end of class

Reminders

- Worksheets

Homework

Notes

Grade 3 Science

Lesson: 3-5

Unit: Soils in the Environment

Topic: Comparing Soils

Lesson

- Review safety when dealing with soil
 - keep it on paper
 - No throwing
 - Wash hands
- Hand out worksheets
- Read through worksheet, explaining (clarifying) task
- Inform students that by the end of class they are to be done their observations (they do not need to be done their questions)
- Students perform experiment in groups of 2 or 3
- Clean up at end of class

↗
~ 10 minutes

Reminders

Supplies Needed

- Newspaper
- Toothpicks
- Magnifying glasses
- 3 soil samples
- Worksheets

Homework

Notes

- Need ~ 7-10 minutes more to do
 - Have students add multiple things to "other observations"
 - Have students start questions?

Grade 3 Science

Lesson: 3-6

Unit: Soils in the Environment

Topic: Separating Soil

Lesson

- Explain that today we will start a new experiment, then will finish previous experiment with our remaining time.
- Hand out worksheet
- Read through → focus on sand, silt and clay
- Explain experiment
- Student perform task in — groups (* depends on # of Jars)
- When done as far as possible today, students then work on questions from previous experiment

Reminders

None

Supplies Needed

- Soil
- Water
- Jars
- Worksheets

Homework

Notes

Use pop bottles?

Grade 3 Science

Lesson: 3-7

Unit: Soils in the Environment

Topic: Comparing / Separating Soil

Lesson

- Inform students that today they will finish both of their previous experiments.
- Students start by observing their soil jars
 - * Do not touch
- Students then answer questions for both experiments
- Save some time at the end of class to discuss results

Reminders

Supplies Needed

- Jars w/ soil from previous class.

Homework

Notes

Grade 3 Science

Lesson: 3-8

Unit: Soils in the Environment

Topic: Drainage

Lesson

- Review 3 ^{components} types of soil → sand, silt, clay
- Review loam → combination → mixture of all 3, often containing humus ↑
↓
decayed organisms
- Discuss today's experiment
- Students get partners, read through experiment
- Students then perform experiment
- Clean up at end of class

Reminders

None

Supplies Needed

- Soil samples
- Graduated cylinders
- Funnels
- Worksheets
- Coffee filters
- measuring cups (~150ml)

Homework

Notes

Grade 3 Science

Lesson: 3-9

Unit: Soils in the Environment

Topic: Composting

Lesson

- Bring green bin to carpet
- Discuss contents
- Ask "What will happen with this when it leaves school?"
 - mixed with other compost
 - turned into soil.
- Explain worksheet
- Hand out worksheet
- Students work for remainder of period
- Take up answers if done early

* Read info with weaker students.

Reminders

None

Supplies Needed

- Compost
- Worksheets

Homework

Notes

Grade 3 Science

Lesson: 3-10

Unit: Soils in the Environment

Topic: Soil

Summary of Soils

Lesson

- Explain today's task → Use previous worksheets to create a study sheet for a quiz to be written next week.
- Show students paper, explain that quiz will be very similar to review sheet
- Allow students to work on study sheet
 - When done students are to verify answers with others
 - Students may then finish up other work
- Take up answers as class
- If time left, students may finish up other work or may begin studying for quiz.

Reminders

Supplies Needed

- Study sheet
- Answers (to be handed to accommodated students)

Homework

Notes