



ROOTS, STEMS, LEAVES: LESSONS OVERVIEW

ALL COMPLETE LESSON PLANS AND STUDENT SHEETS AVAILABLE ON THE WEBSITE: WWW.MIAMICOUNTYPARKS.COM/NODE/1257

SLUG SCIENCE JOURNEY VIDEO (20-MINUTES)

STANDARDS: 3.LS.3

DESCRIPTION: Cinda Wind ~the gentle breeze~ introduces students to The Banana Slug String Band and together they go on a journey to learn about “Roots, Stems, Leaves”! Students will discover the secrets of the amazing 6 plant part structures that plants and people need! What plant part will they find in the mysterious plant part bag? Students will turn into a plant actor and receive an invitation to become a member of the tree stem’s perfect fit club! This will be the main resource that students will reference for the below activities.

SONG BOOK

STANDARDS: 2.RF.3, 2.RF.4, 3.RI.1, 3.LS.3

DESCRIPTION: The online book provides the students a version of the Banana Slug song, “Roots, Stems, Leaves” in a read along format. Each student will be able to read through the book at their own pace and have the concepts re-emphasized through the illustrations first introduced in the Slug Science Journey video.

LESSON 1: MEET A TREE!

STANDARDS: 2.SL.2, 3.SL.4, 3.SL.6, 3.LS.3

DESCRIPTION: As the PLANT MAN demonstrated in the Slug Science Journey video, students are challenged to explore with all their senses the stems of trees and imagine the xylem and phloem inside the bark that carries the water up and the food down the tree. Students need to determine with the sense of touch only how their tree is different from all others around.

LESSON 2: PERFECT FIT CLUB

STANDARDS: 2.SL.6, 3.SL.6, 2.MD.1, 3.LS.3

DESCRIPTION: Students are challenged to go outside and to locate a tree. Just like Plant Man in the Slug Science Journey video, the student needs to find a tree that perfectly fits them to hug! Once they find the “perfect fit,” the student needs to measure the circumference of the tree, then measure their own extended arm length and compare their measurements.

LESSON 3: 6 PLANTS PARTS MIX-UP

STANDARDS: 2.SL.6, 3.SL.6, 3.LS.3

DESCRIPTION: The 6 Plant Parts Mixup Challenge, can be completed in the classroom as well as at home using the game pieces provided in the Discovery Kit. The game board pieces are color-coded to help the students identify which part of the plant they represent. There are numerous cards of each type so that they can play several rounds.



LESSON 4: 6 PLANT PARTS TAG

STANDARDS: 3.LS.3

DESCRIPTION: Professor Airy Larry and Plant Man introduced students to the “6 Plant Parts Tag” in the video journey.

This activity encourages students to get outside and explore their environment while reinforcing the concepts of the different parts of a plant and their functions.

LESSON 5: VOCABULARY

STANDARDS: 2.RI.4, 2.L.4, 3.L.4, 3.RI.4, 3.LS.3

DESCRIPTION: The glossary assists students with newly introduced words in the Slug Science Journey video, book and additional resources. The matching exercise encourages the student to read, write and comprehend the new words.

LESSON 6: SPROUT THE PLANT PARTS

STANDARDS: 2.MD.1, 2.MD.2, 2.MD.10, 3.MD.3, 3.LS.3

DESCRIPTION: The students will use the plastic tube to grow a bean seed. (See the Student Sheet for detailed instructions. While seeds are growing, the student can measure growth each day with a ruler. Additionally, the student can complete the Growth Chart Student Sheet to show how much the sprout grows each day. Finally, the students can complete the bar graph and answer the questions on the Bar Graph Student Sheet. After 4 weeks the students can transplant the plant into the flowerpot (they can decorate the flowerpot with a marker) and keep it!

LESSON 7: VENN DIAGRAM

STANDARDS: 2.RF.3, 2.RF.4, 3.RI.9, 3.RF.3, 3.RF.4, 3.LS.3

DESCRIPTION: Students will compare and contrast plant parts, and/or 2 books about plants.

LESSON 8: PLANT PARTS REPORT

STANDARDS: 3.SL.4, 3.SL.6, 3.LS.3

DESCRIPTION: Through the use of a guided template, students will be able to complete a report on a plant of their choice. The student can present their report orally to the class, or remotely.

ADDITIONAL ACTIVITIES:

PLANT PARTS MYSTERY BAG

DESCRIPTION: Students will collect plant parts and test their friends! They will try to guess which plant part they feel in the bag. They will also complete a writing assignment about their plant parts on the student sheet.

PLANT PARTS DIE GAME

DESCRIPTION: Students will roll a die which has the 6 plant parts on each side to complete several games.

EAT A STEM

DESCRIPTION: Students can enjoy a celery snack with this simple activity.

QUIZ

DESCRIPTION: A 10-question true/false quiz assesses the comprehension of the student after viewing the Slug Science Journey video and reading the song book.

NATURE JOURNAL (INSTRUCTIONS ARE INCLUDED INSIDE KIT)

DESCRIPTION: Students will assemble a nature journal that they can use for reflecting on activities, creating drawings, and any other ways they would like. The journal contains a list of prompts on the inside cover for ideas.

READING ENRICHMENT PICTURE BOOKS

DESCRIPTION: A selection of picture books may be provided in your teacher resource bag.

1. These books focus on this topic and are a part of our park Nature Quest Book Library.
2. Some lessons above may refer to reading one of these books before doing the specific activity.
3. Inside the cover of each book there are additional “connect to nature” activities that you might have fun doing also with your students that connect directly with that book.
4. On these book cards there might be mention of discovery tools (part of our Family Nature Quest backpack program) to use with book activities but if you do not have those in your SCIENCE JOURNEY kits these little extra activities can be done without those specific tools.