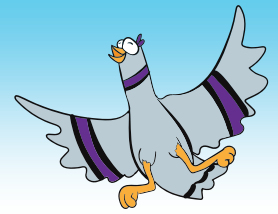




# WEATHERING, EROSION, DEPOSITION: LESSONS OVERVIEW



[WWW.MIAMICOUNTYPARKS.COM/NODE/1253](http://WWW.MIAMICOUNTYPARKS.COM/NODE/1253)

## SLUG SCIENCE JOURNEY VIDEO (20 MINUTES)

**STANDARDS:** 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** Cinda Wind~the gentle breeze~ introduces students to The Banana Slug String Band and together they go on a journey to learn how landforms are created through Weathering, Erosion and Deposition! Students will become a mountain builder, and they will unleash the power of weathering, erosion and deposition upon their very own mountain! Students will use this video as the primary resource for their investigations.

## LESSON 1: VIDEOQUEST

**STANDARDS:** 4.RI.4, 4.RI.7, 4.RF.3a, 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** Students will go on a quest through the Slug Science Journey video to identify key vocabulary taught by the Banana Slugs.

## LESSON 2: EXPERIMENTS

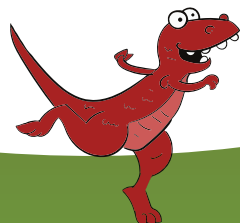
**STANDARDS:** 4.RI.3, 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** Students will complete experiments demonstrated in the Slug Science Journey video, including making their own mountain and viewing the effects of wind, water, and sun. They will also recreate a moraine, try the rock freezing experiment, and do a Weathering, Erosion Demonstration with Cookies! Taking notes and answering explicit questions will be part of the experiments. Students will submit photo and video evidence of their experiments using FLIPGRID.

## LESSON 3: MAIN IDEA AND KEY DETAILS

**STANDARDS:** 4.RI.2, 4.RF.4a, 4.W.4, 4.W.9b, 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** Part 1: Students will read the article Sediments in the Wind (Readworks.org). Using the provided graphic organizer, students will determine the main idea and key details of the article. Part 2: Students will use the information contained in the graphic organizer to create a paragraph summary. Lesson contains: Teacher lesson plan, student sheet for recording main idea and key details, student sheet for summarizing, Sediments in the Wind article.



## **LESSON 4: INTERPRETING ILLUSTRATIONS**

**STANDARDS:** 4.RI.7, 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** Using illustrations from the Slug Science Journey video, students will demonstrate understanding by labeling the illustrations and answering explicit questions.

## **LESSON 5: ORAL PRESENTATION**

**STANDARDS:** 4.SL.2, 4.SL.4, 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** The student will use all of the resources and experiments they have completed to create an oral presentation. They will video record the presentation and submit it to the teacher using FLIPGRID. An outline is provided of what should be included in the video.

## **LESSON 6: MEASUREMENT & DATA**

**STANDARDS:** 4.MD.4, 4.ESS.1, 4.ESS.2, 4.ESS.3

**DESCRIPTION:** The students will use a set of data based on inches of erosion off of a mountain to make a line plot. Then they will use the line plot to solve simple addition and subtraction problems.

## **ADDITIONAL ACTIVITIES: FOSSIL FINDER**

**DESCRIPTION:** Students will “wear away” layers of rock by carving and brushing away bits and pieces to discover a real fossil.

## **READING ENRICHMENT PICTURE BOOKS**

**DESCRIPTION:** A selection of picture books will 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.