



HEAT AND PRESSURE: LESSONS OVERVIEW

ALL COMPLETE LESSON PLANS AND STUDENT SHEETS AVAILABLE ON THE WEBSITE: WWW.MIAMICOUNTYPARKS.COM/NODE/1252

SLUG SCIENCE JOURNEY VIDEO (20-MINUTES)

STANDARDS: 3.ESS.1

DESCRIPTION: Cinda Wind introduces students to The Banana Slug String Band and together they go on a journey to learn about how rocks are formed! Students will use this video as the primary resource for their investigations.

SONG BOOK

STANDARDS: 3.RF.4, 3.ESS.1

DESCRIPTION: The online book provides the students a version of the Banana Slug song, "Heat and Pressure" 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: VIDEOQUEST

STANDARDS: 3.RI.4, 3.RI.7, 3.RF.3, 3.ESS.1

DESCRIPTION: Students will go on a quest through the Heat & Pressure Slug Science video to find and define key vocabulary words and answer explicit questions.

LESSON 2: ROCK EXPLORATION

STANDARDS: 3.W.8, 3.ESS.1

DESCRIPTION: After watching the Heat and Pressure Slug Science Journey video, the students will complete several activities. The Slugs have challenged students to play several rock games. They will play each game and record their results. Students will collect rocks from around their home, school or anywhere of different colors sizes and shapes and make their own rock collection. Then by using the provided rock sorting guide, students will try to make educated guesses on how each of the rocks in their collection was formed. Students will act out how a sedimentary rock is formed by laying on the ground outside having a partner gently put layers of different kinds of sediments over them as Solar Steve demonstrates in the Heat & Pressure Slug Science Journey video. They will submit pictures and videos using FLIPGRID for each of the above activities.

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LESSON 3: MAIN IDEA AND KEY DETAILS

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

DESCRIPTION: Part 1: Students will read an article chosen by the teacher. 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 4: INTERPRETING ILLUSTRATIONS

STANDARDS: 3.RI.7, 3.ESS.1

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

LESSON 5: ORAL PRESENTATION

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

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: DATA & MEASUREMENT

STANDARDS: 3.MD.3, 3.ESS.1

DESCRIPTION: Using the data collected while playing the rock games, students will create a simple picture graph and bar graph.

ADDITIONAL ACTIVITIES:

IF A ROCK COULD TALK

DESCRIPTION: Students will choose a pet rock and complete a writing activity.

NATURE JOURNAL (DIRECTIONS PROVIDED IN STUDENT 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.