



**United States Department of the Interior
California Department of Parks and Recreation**



Redwood National and State Parks
1111 Second Street
Crescent City, California 95531

October 2015

Dear Partner in Education:

Hello from Redwood National and State Parks, and thank you for choosing to implement our First Grade: Structure and Function video series into your classroom! It is our sincere hope that this curriculum will be helpful to you.

In this packet, you will find our proposed lesson plan and the corresponding activities students should complete after watching each video. Please make any modifications you feel will be helpful for your students in grasping the content we have presented.

In the program, park rangers will cover:

- I. Introduction to Structure and Functions
- II. Animal Teeth (Chompers)
- III. Structures of a plant/tree and their functions (Redwood Trees)

After you complete the curriculum, we would appreciate your feedback by mailing back the evaluation form to:

**Chief of Interpretation
Redwood National and State Parks
1111 2nd Street
Crescent City, California 95531**

Thank you and we hope you visit us here in Northern California in the near future!

Education Staff at Redwood National and State Parks

Subject(s): Structure and Function

Targeted Grade: 1st Grade

Teacher(s): Park Rangers (Education Staff)

School: Virtually from Howland Hill Outdoor School, Redwood National and State Parks

LESSON ELEMENTS

1a. California Common Core Learning Standard(s) Addressed:

First Grade Life Sciences: Plants and animals meet their needs in different ways. As a basis for understanding this concept:

A. Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.

B. Students know both plants and animals need water, animals need food, and plants need light.

D. Students know how to infer what animals eat from the shapes of their teeth (e.g., sharp teeth: eats meat; flat teeth: eat plants).

E. Students know roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight.

1b. Next Generation Science Standard(s) Addressed:

First Grade LS1-1: Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs

2. Learning Target(s):

Students will understand that plants and animals meet their needs in different ways, and be able to demonstrate how different structures and corresponding functions help all living things survive in their environment.

3. Relevance/Rationale:

The content presented sets a strong foundation for understanding and being able to articulate content presented in future life sciences/biology classes.

In addition, this content will assist students in understanding how plants, animals, and humans are able to survive in their environments.

4. Formative Assessment Criteria for Success:

Students will complete the activities with little to no assistance from the teacher.

5. Activities/Tasks:

1. Have students watch Park Ranger Video #1: Structure & Function.

This video introduces the students to Redwood National and State Parks, structure and function, and provides an example of different structures and their functions on the banana slug.

2. Have students complete Activity 1 and 2.

Activity 1: Print and give each student a copy of the banana slug and the labels. Have the students color and cut out the labels; have the students label the structures of the banana slug. Have the students match the function with the structure.

Activity 2: Work with the students to list animals that live nearby. Then, list a few structures that the animals has and the corresponding functions of those structures. The purpose is to help the students connect the information presented in the video to the animals that live in their neighborhoods.

Ex:

ANIMAL	STRUCUTRE	FUNCTION
Dog	Tail	Helps the dog balance
	Paws	Used for walking

3. Have students watch Park Ranger Video #2: Chompers.

This video builds upon structure and function and introduces the students to the teeth structures of herbivores, carnivores, and omnivores and how those structures allow the animal to eat certain types of food. Students will complete Activity 3 with the park rangers.

Activity 3: Print Activity 3 and hang the animal pictures at the front of the room. With the ranger on the screen, help the students decide what type of food the animal eats based on its teeth.

4. Have students complete Activity 4.

Activity 4: Park Ranger Video Worksheet: Chompers Have 1 copy of the worksheet per student. In part 1, have the students circle the type of food the animal eats based on the type of teeth they have. In part 2, have the students draw their favorite animal, the type of teeth that animal has, and something that animal would like to eat.

5. Have students watch Park Ranger Video #3: Redwood Trees.

This video teaches students that like animals, plants have different structures they use to find the things they need to live; in addition, it shows four different plant structures (roots, bark, needles, cones) and their corresponding functions, using a Redwood tree as an example. Students will then complete Activity 5 with the park rangers.

Activity 5: Print Activity 5 and place on the walls around the room. In the first round, park rangers will name a structure and the students will walk to the picture of that structure. In the second round, park rangers will describe the function of a structure and the students will walk to the picture of that structure.

6. Have students complete Activity 6.

Activity 6: Print out a copy of a BINGO card for each student- we have provided 25 bingo cards. Each square has the picture of a structure discussed in the videos. The teacher should call out the functions of those structures.

6. Resources/Materials:

1. Park Ranger Videos #1, 2, 3
2. Activities 1, 3, 4, 5, 6 Materials/Worksheets (Attached)
3. Yarn

Virtual School Program Evaluation

Thank you for using this video series in your classroom! Please take a respond to the questions below. Feel free to comment beyond AGREE or DISAGREE; thank you for helping us improve!

1. This program was age/grade/ability appropriate. Agree Disagree Both

Explain: _____

2. The program integrated well into my established curriculum. Agree Disagree Both

Explain: _____

3. The program connected to the students' lives and society. Agree Disagree Both

Explain: _____

4. The program helped the students understand more about their natural world.

Agree Disagree Both

Explain: _____

5. Instructional materials were interesting, appealing, and easy for students to use and understand.

Agree Disagree Both

Explain: _____

6. The program had the students engaged in active learning. Agree Disagree Both

Explain: _____

11. I liked this most about the program: _____

12. How did you hear about this virtual school program? _____

13. What state/country are you located in? _____

14. Are you interested in additional virtual school programs? _____

14. Additional comments? _____

(continue on back if needed!)

Mail completed evaluation to:

**Chief of Interpretation, Redwood National and State Parks
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Crescent City, CA 9553**