



Evening Beach Exploration

2017 - Driftwood Education Center



Class Description:

Humans are most comfortable during the day, but join us as we take you out of your comfort zone, and explore the beach at night! Students will use all five senses to examine what it would be like to have to survive at night. Several nocturnal activities will get participants rethinking the abilities that creatures must have in order to thrive in dark places. This is a seasonal activity.

Driftwood Education Center
Po Box 20712 St. Simons Island, GA 31522
Phone: 912.638.3849 Fax: 912.634.0642
www.driftwoodee.org

Evening Beach Exploration

Table of contents and outline:

I. Pre-class set-up

1. Be sure that all materials are available.
2. Staff and students should be loading the bus 15 minutes before class starts and leaving by the time class starts.

**Travel time - 15 minutes there and 15 minutes back

II. Introduction, overview, and assessment (5 min.)

1. Introduce students to class.
2. Discuss with students the class's rules.
3. Introduce nocturnal animals and

adaptations.

III. Evening Exploration Activities (50 min.)

- | | |
|----------------------------|------------------------|
| 1. Night Drawing | 6. Turtle Crawl |
| 2. World's Brightest Light | 7. Egg Find |
| 3. Pass an Object | 8. Survivor Turtle |
| 4. Smelly Jars | 9. Turtle Hurdles |
| 5. Lifesaver Fireworks | 10. Build a Sea Turtle |

Concepts 1-3, Outcomes 1-3

IV. Conclusions and Wrap-up (5 mins.)

1. Have students look at their drawings and/or the color of their crayon.
2. Have a brief discussion about human and nocturnal animal adaptations.

V. Clean Up

South Carolina Standards met

4th Grade: 4.L.5. Demonstrate an understanding of how the structural characteristics and traits of plants and animals allow them to grow, survive, and reproduce.

5th Grade: 5.L.4B.1 Explain how organisms obtain their energy and classify an organism as producer, consumer or decomposer.

6th grade: 6.L.4. Demonstrate an understanding of how scientists classify organisms and how the structures, processes, behaviors, and adaptations of animals allow them to survive.

7th Grade: 7.EC.5 Demonstrate an understanding of how organisms interact with and respond to the biotic and abiotic components of their environments.

Concepts:

Focal points of this class are:

1. Animals have adaptations which help them be successful in their environment.
2. Humans learn about the world through their senses.
3. Awareness is the key to getting over fears, such as a fear of the dark.

Outcomes:

Upon completion of this class, students will be able to:

1. List a few adaptations animals have to help them survive in their night environment.
2. Compare human senses to nocturnal animal senses.

Georgia Performance Standards met

4th Grade: S4L1. Obtain, evaluate, and communicate information about the roles of organisms and the flow of energy within an ecosystem.

5th Grade: S5L2. Obtain, evaluate, and communicate information showing that some characteristics of organisms are inherited and other characteristics are acquired.

7th Grade: S7L4. Obtain, evaluate, and communicate information to examine the interdependence of organisms with one another and their environments.

Florida Standards met

4th grade: SC.4.L.16.3 Recognize that animal behaviors may be shaped by heredity and learning.

5th grade: SC.5.L.17.1 Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycle variations, animal behaviors and physical characteristics.

6th grade: SC.6.L.15.1 Analyze and describe how and why organisms are classified according to shared characteristics.

7th grade: SC.7.L.17.1 Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.

Next Generation Science Standards:

4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

MS-LS1-4. Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.