

Lesson Plan

Right Whales

1. Background

a. Content

- i. Overview of the Right Whale species including:
 - Types of Right Whales
 - History and population
 - Anatomy
 - Geographical coverage
 - Mating and reproduction
 - Environmental threats
 - How you can get involved

b. Class Description

- i. 6th Grade (11-12 years old)
- ii. Mission Estancia Elementary School
- iii. Teacher: Mrs. Masterson
- iv. Approximately 32 Students
- v. All English speakers and no known disabilities
- vi. No specific modifications to lesson plan required

c. Bibliography (see attached)

d. Research Paper (see attached)

2. Lesson Objectives

a. Science Content Standards for California Public Schools, Grade Six

Ecology (Life Sciences)

5. Organisms in ecosystems exchange energy and nutrients among themselves and with the environment. As a basis for understanding this concept:

- b. Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment.
- c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem.
- d. Students know different kinds of organisms may play similar ecological roles in similar biomes.

b. Other

- i. By the end of the lesson students will have a grasp of the following concepts:
 1. Effects human activities can have on whales
 2. How humans can coexist with whales

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3. Anticipatory Set

a. Beginning Activity (5 minutes)

- i. How is a whale like a fish or land animal (mammal)? This will include a PowerPoint slide which will highlight a few key characteristics of whales and ask the class to discuss and vote on whether each characteristic is like a fish or mammal. The correct answer will be shown after each vote.
- ii. See beginning slides in attached PowerPoint

4. Main Lesson

a. Main Lesson (30 minutes)

b. Hands-On Activity (15 minutes)

- i. How blubber keeps whales warm
 1. A large plastic bag is lined with Crisco or other shortening
 2. Each student gets a small plastic zip bag to put on their hand
 3. One student at a time (with assistance from teacher or student-teacher) puts their hand with bag on it inside of the Crisco bag
 4. The student then puts their hand into a bucket of ice
 5. The student notes that their hand does not feel cold
 6. At the end of the activity the students are told that the Crisco acts like blubber, which is a fatty substance to insulate the body from outside cold water

c. Procedures/Materials needed

- i. Lesson - Computer with PowerPoint and projection capability
- ii. Hands-on activity
 1. 2 small buckets
 2. 1 large bag of ice
 3. Crisco
 4. 2 large plastic zip bags
 5. 3 dozen small zip bags

d. Assessment (10 minutes)

- i. The Right Whale Challenge
 1. Split class into two groups (right and left)
 2. Ask questions from lesson
 3. Each side gets a turn to answer question
 4. The team has to agree on one answer
 5. If correct, that team gets a point
 6. If incorrect the other team gets a chance to answer correctly and win a point
 7. The team with the most points at the end wins
- ii. See last slide of presentation for assessment questions

Bibliography

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