

Middle School Lesson Plan

Science Grade 7

OBJECTIVES

1. Students will investigate the local marine ecosystem.
2. Analyze dolphin behavior.
3. Evaluate the impact of human activities on coastal conservation efforts.

TEKS ADDRESSED

Science (7.10) - Organisms and Environments: The student knows that organisms interact with one another in various ways.

PRE-TRIP ACTIVITIES

1. **Ecosystem Interactions:** Review the concept of ecosystems and discuss the interconnectedness of organisms within them. Explore how human activities can affect marine ecosystems.
2. **Dolphin Behavior Research:** Assign students to research dolphin behavior, focusing on topics such as communication, social structure, and hunting strategies. Have them present their findings to the class.

FIELD TRIP- MARINE EXPLORATION

1. **Hands-On Exploration:** Conduct hands-on activities during the field trip, such as water quality testing, plankton sampling, or shoreline clean-up. Emphasize the importance of data collection in understanding and conserving marine environments.
2. **Dolphin Behavior Observation:** Lead students in observing dolphin behavior in their natural habitat. Encourage them to record their observations and note any interactions with other marine species.

POST-TRIP ACTIVITIES

1. **Data Analysis:** Have students analyze the data collected during the field trip, discussing trends in water quality, biodiversity, and human impact on the marine ecosystem.
2. **Conservation Action Plan:** In small groups, have students develop a conservation action plan for protecting the local marine ecosystem. They should consider strategies for reducing pollution, conserving habitats, and promoting sustainable practices.

ASSESSMENT

Students will be assessed based on their participation in pre-trip research and discussions, data analysis skills, and the feasibility and effectiveness of their conservation action plans.