Lesson 1 Pre-Assessment and Whale Wall

Overview
Students will work in small groups to discuss their prior knowledge on whales and the conservation issues surrounding them. As a class, teacher and students will generate a KWL chart along with a Whale Word and Picture Wall. Students will work in small groups to explore the Whales: Voices in the Sea website. If time allows, students will use Google Earth to view the geography and habitat range of various whale species.

National Science Education Standards
Content Standards K-4
Science as Inquiry: Abilities necessary to do scientific inquiry, Understanding about scientific inquiry.
Life Science: The characteristics of organisms, Life cycles of organisms, Organisms and environments.
Science and Technology: Understanding about science and technology.
Science in Personal and Social Perspectives: Characteristics and changes in populations, Types of resources, Changes in environments.
History and Nature of Science: Science as a human endeavor.

Content Standards 5-8
Science as Inquiry: Understandings about scientific inquiry
Life Science: Regulation and behavior, Populations and ecosystems, Diversity and adaptations of organisms.
Science in Personal and Social Perspectives: Populations, resources, and environments, Science and technology in society.
History and Nature of Science: Science as a human endeavor.

Ocean Literacy Principles
Principle 1: The earth has one big ocean with many features.
Principle 5: The ocean supports a great diversity of life and ecosystems.
Principle 6: The ocean and humans are inextricably interconnected.

Performance Objectives
Students will:

• Develop skills in teamwork and group learning.
• Describe the various habitats of whale species.
• Be able to describe whale species and the conservation issues surrounding them.

Key Words for Whale Wall
Endangered, Conservation, Habitat, Pollution, Whale, Dolphin

Materials

• Student Journal
• 6 large sheets of paper (poster paper or large Post It Poster Sheets)
• 6 colored markers (1 color for each group in carousel brainstorming activity)
• White paper for sketches
• Colored pencils, pens, crayons
• Magazines and other colored print outs of whales and ocean habitats for Whale Wall

**Before Class**
1. Print out and staple Student Journals.
2. Create an empty wall space in room with the title of “Whale Wall”
3. Browse through the website *Whales: Voices in the Sea* to become familiar with content.
4. Reserve space in your schools computer lab or library for student access or make sure there is internet access on your classroom computers. You can project the website onto the wall if your classroom and explore the website as a class.
5. Write following words on the board in order to guide the KWL session: Know? Want to Know? Learned?
6. On the top of each piece of poster paper write the word the students will be brainstorming on:
   - Whales
   - Dolphins
   - Pollution
   - Conservation
   - Habitat
   - Endangered

**Introduction Procedure**
If possible project the menu page from *Whales: Voices in the Sea* at the front of the room. What animals do they see? “This week the class will be exploring whales and the ocean world they live in. A corner of the classroom will be transformed into our whale wall, with words and pictures displaying what the class has learned through the week.”

**Carousel Brainstorming Activity**
1. Divide students into six groups
2. Provide each group with a colored marker. This will be the marker they carry with them as they rotate around the room to the various posters.
3. Each team will gather around a set of desks with a piece of poster paper on it. They will have 3 minutes for each topic and will rotate around the room.
4. Instruct each team to write down everything they know on the topic listed on the paper. They can work with each other to develop the list.
5. After 3 minutes are up students will rotate to the next topic. The team should review the list of the previous groups and write anything new not currently listed. Bring completed posters to the board and place under the heading “Know.”
6. Discuss what was written. Each group can stand and list what they wrote (each group has their own color to make it easier to identify who wrote what)
7. Instruct students to list a few of the items from the board in their Student Journal.
KWL Activity: What do you know? What do you want to know? What did you learn?

1. The carousel brainstorming session enabled the class to establish what they already know about whales and the issues surrounding them.

2. As a class discuss what they would like to learn this week about whales, the sea, and conservation issues. What questions do they have?

3. List ideas on the board and in Student Journals.

4. Depending on computer availability students can work alone, in pairs, small groups or as a class with projected website on wall to explore the WHALES: Voices in the Sea website. Instruct students to watch the videos as well as view the various species pages. Encourage students to make notes and sketches in their Student Journal. This time is for an introduction to the content and lay out of website. Throughout the week students will be directed back to the website during lessons.

5. Conclude internet activity with a class discussion on what they learned by exploring the website. They can put the 3 most interesting things they learned in the Student Journal.

6. Ask students to list anything that helped them answer the questions generated in the “What do you want to know?” discussion.

Whale Wall Activity

1. Refer students to the words on the board. This will be the first set of words to add to the Whale Wall.

2. Pass out plain paper, crayons, pencils, pens and magazines for students to create images for the whale wall.

3. After each lesson allow time for the addition of the Whale Wall words and images.

4. To save time prepare the words in large font in advance. Add the words to the board at the end of each lesson and instruct students to create the images.

Extension

Throughout the week the students can use Google Earth to locate and view the areas featured in the videos as well as the habitat ranges for each species. Go to http://earth.google.com/ to download the free program.