WHALES

Pronged Focus:

Social Studies: History of whales, timeline of changing cultures and the impact on whale species.

Language Arts: Write a story about a day as whale

Science: Different species of whales, where do they live, specific habitat needs or oceans.

Math: How much do whales eat every day? Populations of different whale species

Drama: Have a debate about whale hunting for and against the matter and factors that influence extinction.

Integrating Two of the Arts

Visual Art: Complete a tile for the class whale picture

Dance: Participate in a whale dance and movement

Student Objectives

Students will:
1. Learn about the two different kinds of whales: toothed and humpback
2. Learn about aspects of a whales life: habitat, social structure, communication, reproduction, and food.
3. Create their own whale dance and movements based on specific scenarios given by the teacher.
4. Write about what it would be like to spend the day as a whale.
5. Color a tile for the class whale art project.
6. (Optional) Read their paper about their day as a whale to the class.

Teaching Procedure:

Introduction: Students will listen to "The Whale Song," by Dyan Sheldon

Development:
Teacher will:
1. Introduce whales as mammals like humans.
2. Discuss the characteristics that categorize whales as mammals.
   a. warm-blooded
   b. presence of hair on the body
   c. 4 chambered heart
   d. mammary glands to feed offspring
1. Teach some of the general facts about whales
   a. streamlined bodies to help them move through the water
   b. swim by moving muscular tail (fluke) up and down
   c. one of the two species of mammals who spend their whole life in the water
      d. breathe air into lung through a blowhole instead of having gills like fish
4. Turn on some ocean or music of whale songs. Have the students stand up and close their eyes. They are going to be doing whale movements to the music that will be generated from topics or questions that the teacher asks.
   a. How do you swim when you are relaxed?
   b. How do your fins move when you swim?
   c. How does your mouth move when you eat?
   d. How do you sleep?
5. Teach about the two different kinds of whales: Baleen & Toothed
   a. 66 species including Orcas, Sperm, Beluga, and Narwhal
   b. Peg like teeth to catch fish
   c. Has 1 blowhole on the top of its head
   d. Live in large stable groups called pods
   e. Communicates with whistles and clicks
      j
   Baleen:
   a. 10 species including Blue, Gray, Humpback, Right, and Fin
   b. Baleen is a comb-like structure in the mouth that filters food (crustaceans/fish) out of the water
   c. They have 2 blowholes on the top of the head
   d. Usually alone or in small unstable pods
   e. Communicate with low frequency songs
6. Share some fun whale facts
   a. BIGGEST WHALE: Blue Whale: can reach 1 10ft. in length as tall as a ten story building, largest animal ever to inhabit the earth, bigger than any dinosaur, no predators except man
   b. FASTEST WHALE: Orca: 30 miles per hour
   c. DEEPEST DIVE: Sperm Whale: 10, 200ft. to hunt for giant squid, can stay under water for 40 minutes at a time
7. Give each child a tile from the class whale picture to color with any medium that they choose. When they are finished put all the tiles together to make the final picture, which will then be displayed in the hallway for the rest of the school to admire.
8. The students will be asked to write a one page paper about what it would be like to be a whale for a day. They should use the information that they learned that day and include it in their paper. Some things that may want to be included are what do you eat, what are your activities, do you see other whales, if so who are they, what are your opinions about humans, and do you have a place that you call home. The paper will be turned in for teacher evaluation.

Conclusion:
Students will:
- Write about what it would be like to be a whale for a day
(Optional) Students can volunteer to read their whale story to the class
- Color a tile from the class whale project
- Display finished whale
- Participate in whale dance/movement
- Whale worksheets if time commits

Assessment:
1. Students will turn in their "Day as a whale" paper for teacher evaluation
2. Student will complete their tile for the class whale project and it will be displayed.

Toothed Whale

Narwhals are social whales that live in frigid Arctic waters. Narwhal means "corpse whale" in Old Norse; this is perhaps a description of their skin, which is bluish-gray with white blotches (young narwhals are brown).

Anatomy: Males have a very long, hollow, spiral tooth. Narwhals can grow to be about 16 feet (4.5 m) long (not counting the tooth), and weigh about 1.8 tons (1.6 tonnes).

Hunting and Diet: Narwhals eat fish, squid, shrimp, and other marine animals.

Baleen Whales

Read the definitions, then label the baleen whale (a blue whale) diagram below.

- **baleen plates** - comb-like, flexible material that hangs from the upper jaw of baleen whales and filters food from the water.
- **eye** - sight organs located on the head.
- **blowhole** - each of the two holes on the top of the baleen (whale's head through which the whale breathes air (they are the whale's nostrils).
- **fluke** - one half of the tail.
- **dorsal fin** - the fin on the upper side of the body.
**flippers** - the pair of wide, flat forelimbs that are used for swimming.

**Throat grooves** - long grooves on the whale’s throat that allow the throat to expand during the huge intake of water during filter feeding. This filters out tiny organisms.

**median notch** - the indentation between the two flukes.

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**Baleen Whale**

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Word Hunt:

How many words can you make using the letters from the following word.

**BOWHEAD WHALE**

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