Whale Watching Project Kit

Congratulations! You're going whale watching! Use these project ideas to enrich your educational experience. Read through them before you go to make sure you understand the terms and concepts, and to help you determine if you want to expand upon any of them. You'll find fun facts and printable worksheets at the end of this packet.

a- elementary level activity b- middle school level activity c- high school level activity

Language Arts

People are built to walk on dry land, but being out on the ocean in a boat is so much fun! When we do new things, or things that are foreign to us, it can be easy to get caught up in the excitement and miss the depth the experience can bring to us. In this project, you'll think about your trip a little deeper and record your thoughts. Do one of the following activities:

a. How is being on the ocean different than being on land? What do you smell? What do you see? What do you feel? What is the weather like? Use all of your senses and write a few sentences or draw a picture about your experience.
b. Think about how large the ocean is compared to the size of the boat you're in. How do you feel? How would you feel if you had to spend months at a time out on the ocean like some people do? Write your thoughts, or a short story, about what it would be like.
c. Take your ocean trip to the next level. Research an ocean subject and write an essay, or write a fictional story set in an ocean setting. Take notes, either mentally or on paper, of things that stand out to you on your trip so you can incorporate them into your writing.

Materials required: Notebook, pen/pencil
Submission: A copy of your writings/drawing, and any pictures/videos

Teaching or learning notes:

Applied Math

There are many ways marine biologists use math when out with whales! Complete one of the projects below:

a. Count the number of animals you see. Group them into categories and graph your findings.
b. Ask your guide about how many whales usually travel in the area you are watching. How many different pods have they identified? How many whales are usually in a pod? Use this information to determine how many whales usually trek through the area. Also, ask your guide about the different ways he/she uses math in their job.
c. You are a whale-watching guide. The last known coordinates for Bessie the whale were north of your current location by 1,537 nautical miles, 14 days ago. You know she is headed south toward your location. If Bessie travels at a speed of 4 nautical miles per hour, how much longer will it take her to get to where you are? When finished solving this problem, design one of your own and solve it!

Materials required: Notebook, pen/pencil, calculator or smartphone (optional)
Submission: Your calculations, estimations, and conclusions, and any pictures/videos

Teaching or learning notes:

Science

Whales might swim like fish and migrate like birds, but they're actually mammals! Learn more about whales by doing one of the following projects:

a. Why are whales mammals? How do they breathe? Do they lay eggs? Do they produce milk for their babies? Draw a picture or write a few sentences about what makes whales mammals.
b. Pay close attention to the way the whales are behaving. Can you spot some of their characteristics which would classify them as mammals? Write about what you observe, including any questions you might have which you can research later.
c. Dive deeper into the life history of whales. Do a short write up on their lives from birth to death. Be sure to include migratory patterns and ecological concern which might threaten them. Ask your guide or do your own research to learn more about these majestic creatures!

Materials required: Notebook, pen/pencil
Submission: A copy of your drawings, diagrams, writings, and any pictures/videos

Teaching or learning notes:

Social Studies

The relationship between people and the ocean has a rich history. Since the beginning of human history, the ocean has played an integral role in sustaining life for coastal peoples. Complete one of the following:

a. What kinds of things can people use from the ocean? Make a list or draw a picture.
b. Imagine what life would be like living on the coast before the discovery of electricity. What would your day look like? What would you eat? How would you stay warm during the winter? How would you build boats? Draw a picture of what your village or town might look like, or write a short story or essay about living in a pre-electricity coastal village.
c. Research an ancient local people that lived in the area. How did they live before settlers arrived? Complete a research project about them. Include drawings/pictures and a short essay describing their culture and the importance of the whales.

Materials required: Notebook, pen/pencil, smartphone (optional)
Submission: A copy of your writings/drawings, and any pictures/videos

Teaching or learning notes:

Fun Facts

- Whales are members of the Cetacea order of marine mammals, which also includes Dolphins and Porpoises.

- Toothed Whales (Odontoceti) are predators eating a variety of marine wildlife, wheras Baleen Whales (Mysticeti) have a filter called a baleen used to sieve tiny food particles from the water.

- Scientists estimate that during feeding season, larger baleen whales eat approximately 4 percent of their body size!

- Whales shed! Yes, it's true; all whales shed. The Beluga whale, for example, sheds when it migrates to the North Pole. By rubbing against rocks, its old, yellowed skin comes off in large sheets, revealing new white skin underneath.

- Whales have been known to live as long as 100 years.

- Much like human fingerprints, the markings on each whale's tail are unique. This helps researchers identify and study them.

- Whales don't actually sleep; they take catnaps. While one half of the brain is sleeping, the other signals it to come to the surface to breathe and keeps it alert to predators.

- Male whales are called bulls, and females are called cows. Their young are called calves.

Whale Watching

1. Draw a picture of your favorite part of the trip.

2. Describe your favorite part and why you love it.

3. Are dolphins mammals? Why?

4. Draw or describe one marine mammal you saw.

5. Draw the boat you rode on.

6. Name 3 animals that live in the ocean that are not mammals?

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BONUS:

Commercial whaling use to be very popular. Now, whale watching is a multi-million dollar business for many areas. Is this a positive change? Why? What types of things must whale conservationists think about when monitoring whale watching activities?