

Gentle Giants of the Sea: A Deep Dive into Whale Sharks

A lesson for a 10-year-old, designed to be taught by a 16-year-old educator like Brody.

Learning Objectives

By the end of this 45-minute lesson, the learner will be able to:

- Describe at least three key characteristics of a whale shark (e.g., size, diet, appearance).
- Explain how a whale shark eats using the term "filter feeder."
- Apply knowledge of adaptations by designing a new, imaginary filter-feeding sea creature.

Materials Needed

- Paper or a whiteboard
- Drawing tools (markers, crayons, or colored pencils)
- A tablet or computer for a short optional video clip
- "Create-a-Creature" worksheet (can be a blank piece of paper)

Lesson Plan

Part 1: Introduction (5-10 minutes)

1. The Hook: Mystery Animal Game

- **What to do:** Start by playing a guessing game. Don't reveal the animal yet.
- **What to say (Talking Points for Brody):** "Hey! Let's play a quick game. I'm thinking of a massive sea animal. I'll give you three clues, and you try to guess what it is."
 - **Clue 1:** "I am the biggest fish in the entire ocean, sometimes as long as a school bus." (*Listen to guesses... probably a whale.*)
 - **Clue 2:** "Even though I have the word 'whale' in my name, I'm actually a type of shark." (*Getting warmer...*)
 - **Clue 3:** "I have a unique pattern of white spots all over my body that's like a human fingerprint—no two are the same! And even though I have a huge mouth, I'm completely harmless to people."
- **Reveal:** It's a WHALE SHARK!

2. Setting the Goal

- **What to do:** Clearly state the learning objectives in simple, friendly language.
- **What to say:** "Awesome! Today, we're going to become whale shark experts. By the time we're done, you'll know some super cool facts about them, understand their weird way of eating, and even get to invent your own sea creature inspired by them. Ready?"

Part 2: Body - The Deep Dive (25-30 minutes)

1. I Do: Presenting the "Wow" Facts (10 mins)

- **What to do:** Share core information about the whale shark. Use a short, engaging video (search for "Whale Shark Facts for Kids" on YouTube) or simply use pictures and your own explanations.
- **What to say (Key Talking Points):**
 - "First off, let's get this straight: It's a shark, not a whale. Whales are mammals that breathe air, but whale sharks are fish that breathe underwater with gills, just like other sharks."
 - "They can grow up to 40 feet long! That's like lining up two large minivans. Despite their size, they are known as 'gentle giants' because they are super calm and pose no threat to humans."
 - "Now for the coolest part: how they eat. They have a mouth that can open over 4 feet wide, but they don't hunt big fish. They are **filter feeders**. Have you ever helped cook pasta and used a strainer to separate the pasta from the water? A whale shark's mouth works just like that. They swim with their mouth open, gulping in tons of water filled with tiny plankton and small fish. Then, they push the water out through their gills, and special pads catch all the food. It's like having a giant food strainer built into your face!"
- **Formative Check-in:** Ask a quick question to check for understanding. "So, in your own words, what does it mean to be a 'filter feeder'?"

2. We Do: Anatomy of a Gentle Giant (10 mins)

- **What to do:** Draw a simple outline of a whale shark together on a piece of paper or whiteboard. As you draw each part, label it and explain its function.
- **What to say:** "Okay, let's draw one of these amazing creatures together. I'll start, and you can copy me or add your own details."
 - Draw a big, wide-open mouth: "This is the giant 'strainer' for filter feeding."
 - Draw the body shape (long and torpedo-like): "This shape helps them glide easily through the water."
 - Add the gills on the side: "This is where the water escapes after they've filtered out their food."
 - Draw the fins (dorsal fin on top, pectoral fins on the side, tail fin): "These help them steer and balance, just like on other sharks."
 - Add the spots: "Don't forget their unique 'fingerprint' spots! Every whale shark has its own pattern."
- **Interaction:** Ask the learner to point to the different parts and explain what they do. "Can you show me the part that helps it filter food? What about the part that helps it steer?"

3. You Do: Create-a-Creature Challenge! (10 mins)

- **What to do:** Transition to the independent, creative task. This is the main assessment activity.
- **What to say:** "Now it's your turn to be a marine biologist and an artist! Your mission is to invent a brand new sea creature that is also a filter feeder. It can be any shape or size you want, but it has to survive by filtering food from the water like a whale shark."
- **Instructions for the Learner:**
 1. **Draw your creature.** Give it a cool name!
 2. **Label its key parts.** Where is its mouth? How does it filter food? How does it move?
 3. **Write a short description.** Answer these three questions below your drawing:
 - What is your creature's name?
 - What does it eat? (e.g., tiny space aliens, micro-plastic, glowing plankton?)
 - What is one cool, unique thing about it? (e.g., It can camouflage, it communicates with

light, etc.)

Part 3: Conclusion (5 minutes)

1. Share and Celebrate

- **What to do:** Ask the learner to present their "Create-a-Creature." Give positive feedback.
- **What to say:** "This looks amazing! Tell me all about your creature. Wow, using its tentacles as a filter is a brilliant idea. You really understood how filter feeding works and got creative with it!"

2. Recap and Reinforce

- **What to do:** Summarize the main points of the lesson quickly.
- **What to say:** "So today we learned that whale sharks are the biggest fish, they are gentle giants with unique spot patterns, and they eat using a super cool method called filter feeding. Scientists study them to learn more about our oceans. Protecting the oceans helps protect incredible animals like these."

Assessment & Success Criteria

Formative (During the Lesson)

- Listen to the learner's answer to the "What is a filter feeder?" question.
- Observe their ability to identify parts on the "We Do" drawing.

Summative (End of Lesson Project)

The "Create-a-Creature" project is successful if the learner:

- Creates a drawing of a new creature.
- Includes an adaptation for filter feeding (e.g., a large mouth, special gills, filtering tentacles).
- Can explain how their creature eats, connecting it back to the whale shark concept.
- Answers the three prompt questions (name, diet, unique feature).

Differentiation and Adaptability

- **For a learner who needs more support (Scaffolding):**
 - Provide a pre-drawn creature outline and have them add the filter-feeding parts.
 - Offer sentence starters for the description, like "My creature's name is ____" and "It eats by ____."
- **For a learner who needs a challenge (Extension):**
 - Ask them to think about the creature's habitat. Where would it live (deep sea, coral reef) and why?
 - Challenge them to research another real-life filter feeder (like a manta ray or a blue whale) and explain one way it's similar to and one way it's different from a whale shark.
- **For a Classroom or Group Setting:**
 - The "I Do" can be a presentation to the whole group.
 - The "We Do" can be done in pairs or on a central whiteboard.
 - The "You Do" remains an individual task, with a "gallery walk" at the end for students to see each other's creations.