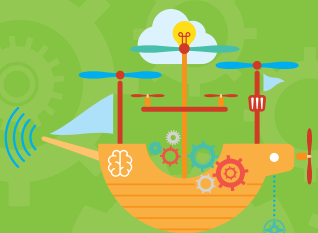




Unleash Your Wild Side

Grades 1-3

CURRICULUM SAMPLE



ENRICHMENT
PROGRAMS

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(800) 429-3110



Unleash Your Wild Side

GRADES: 1-3



STUDENTS Up to 30	TIME 12, one-hour lessons
SUBJECTS <ul style="list-style-type: none"> Life Science Art/STEAM English Language Arts Connections 	SETTINGS <ul style="list-style-type: none"> Summer camps Classrooms Before & After-school programs



Through learn-by-doing **STEAM** projects, learners cultivate language skills, promote global awareness and engage in exercise as they investigate Earth's diverse animals and habitats!

🔄 refill kit available

TECH REQUIREMENTS / PREREQUISITES

- None

PRICING OPTIONS

- Complete Program: \$850⁰⁰
- Curriculum Printed Copy: \$295⁰⁰
- Curriculum Digital Download: \$295⁰⁰
- Refill Kit: \$580⁰⁰



Scan or Click QR Code for:

[PRODUCT ORIENTATION](#)

[FULL MATERIALS LIST](#)

[STANDARDS & ALIGNMENT](#)



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Watercolor Turtles



STEM CONNECTIONS

Science: Biodiversity & The Role of Water

Technology: Creative Communication

Engineering: Defining Problems

Math: Geometry



DURATION

60 Minute Lesson



MATERIALS

- **Sea Turtle Template** (1 per student)
- **Paintbrush, foam 2"** (1 per student)
- **Pencils** (1 per student)
- **Wax paper** (1 large piece per student)
- **Liquid watercolor concentrate, turquoise**
- **Cups, filled with prepared watercolor**
- **Crayons**
- **Epsom salt** (about 1 lb per large group)

SCHEDULE

- Introduction (10 min)
- Fish Gobbler (10 min)
- Ocean Discussion (5 min)
- Watercolor Turtles (30 min)
- Clean Up & Wrap Up (5 min)

OBJECTIVE

From whale tails to fishing sails, dive into the refreshing ocean habitat to explore its depth of flora and fauna!

ALIGNED STANDARDS

- NGSS 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.
- NGSS 2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.
- NGSS K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
- ISTE-S.6.b Students create original works or responsibly repurpose or remix digital resources into new creations.
- CCSS.MATH.CONTENT.2.G.A.1 Reason with shapes and their attributes.

21ST CENTURY SKILLS

- Initiative and Self-Direction
- Social and Cross-Cultural Skills

HABITS OF MIND

- Finding Humor
- Responding with Wonderment and Awe
- Applying Past Knowledge to New Situations

KEY TERMS

- **Ocean:** a very large expanse of sea, in particular, each of the main areas into which the sea is divided geographically.
- **Hexagon:** a plane figure with six straight sides and angles.
- **Sea Turtles:** Sea turtles are found in the warmer waters of the ocean. They spend the majority of their time in the water feeding on jellyfish, fish, crabs, seaweed and many other sea creatures. Female sea turtles return to the same beach where they were born to lay their eggs.

BACKGROUND INFORMATION

Our world's oceans are incredible places. They are also the most diverse habitat on Earth. Because the ocean is so big and surrounds all of continents, it is very different from location to location. Each part of the planet has a different influence on how the ocean looks! Some parts of the ocean are shallow, some are deep, some are warm and some are really cold. In some places, the ocean is so cold that it freezes into solid ice! Oceans habitats have water that contains salt. We call it salt water. Animals that live in ocean habitats can breathe underwater, but some animals, like dolphins and sea turtles, still need to come up for air. This would be impossible for humans, but luckily, these air breathing mammals can hold their breath for long periods of time!

Ocean Riddles:

I live where the ocean water is warm, and I bury myself under rocks. My sharp beak and toothed-tongue help me pry open the shells of my crab and clam dinners. I am a master of camouflage. I can change the color and texture of my skin to reflect my mood or to blend into my surroundings. If I become scared, I release a cloud of purple-black ink and quickly swim away. I have eight long arms called tentacles. Two of my tentacles also act as legs, helping me walk across the ocean floor. What am I? (*An octopus.*)

I am called the ruler of the ocean, and can be found in all seven seas. To breathe, I must keep moving. I never have to worry about losing teeth because they grow back. I will go through 30,000 teeth in a lifetime! I'm a very large predator. I have a keen sense of smell, and can smell just a single drop of blood in the water. I can hear fish swim many miles away and can feel vibrations in the water. Some may call me a picky eater, if I don't like how something tastes, I spit it out. I can see surprisingly well in the ocean, but sometimes I have a hard time distinguishing shapes. From underneath, a turtle and a person look a lot alike. When swimming close to the surface my dorsal fin sticks out of the water. Sometimes I am confused with dolphins. What am I? (*A shark.*)

I can be found in the shallow waters of the ocean. My home is a rough, rock-hard shell that is nearly impossible to open. When I am hungry, I eat algae. If a grain of sand or a tiny piece of food slips in between my two shells, it may eventually turn into a pearl. What am I? (*An oyster.*)

I am called the Spider of the Sea and live in more places than any other sea creature. I can be found deep in volcanic vents, under ice sheets or even living in trees. I have ten legs that bend at the joint, but the first pair are claws that I use to break open shells. To communicate, I rub my pinchers together or drum my claws. I can walk forwards and backwards, but when I am in a hurry, I walk sideways. What am I? (*A crab.*)



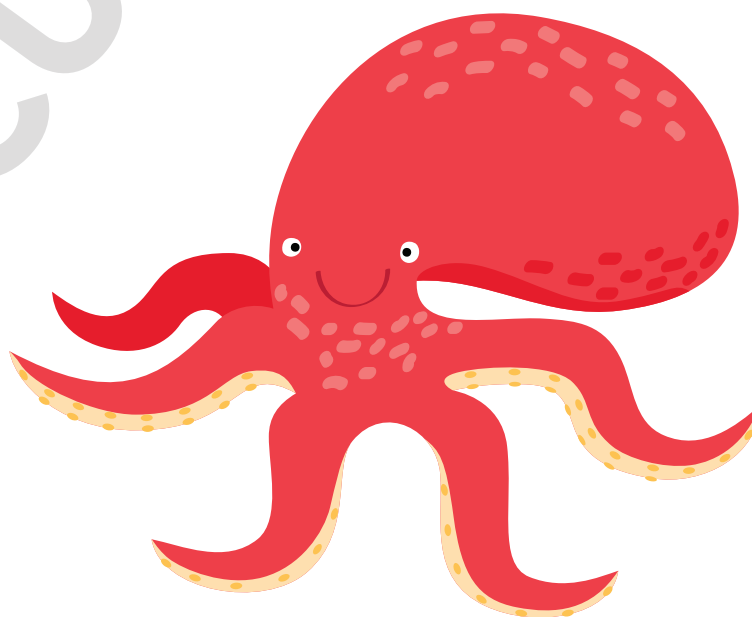
I live in the ocean, but cannot swim. I have many eyes, but can only sense light and dark. Some of my favorite foods are snails, oysters and clams. To open their shells, I wrap my arms around the animal's shell and pull it open just a little. I then push my stomach through my mouth, which is on the underside of my body, into the shell. After eating, my stomach slides back inside my body. Most people think I have five arms, but sometimes I can have up to fifty arms. If I get into trouble, I can lose an arm. It'll grow back. What am I? (A starfish, also called a sea star.)

DAILY PREP

Did you remember your swim trunks? Today is focused on the ocean habitat as campers create watercolor sea turtles. Before getting started, read through the Background Information, lesson, art project and extensions and prepare art supplies for campers.

A few extra considerations before getting started:

- Find a large open area.
- Dilute the watercolor concentrate with water in a 1:1 ratio. If you're stretching the watercolor across multiple groups, be sure to save enough for the following classes. Each camper needs just a small amount, so a few ounces diluted with water is enough for a small class. Leftover diluted paint can be saved and reused with future groups.
- Pour water into cups and fill the middle section of each paint palette with watercolor.
- Be prepared to split campers into work groups. 5 groups of 5-6 works well with the included supplies.
- Set out all supplies in a convenient location for campers to grab. Each of the 5 groups needs 2 water cups, 2 paint palettes and 2 packs of crayons as well as templates, wax paper, paint brushes and pencils for each camper. (Save the Epsom salt to sprinkle yourself.)
- The paint may take over an hour to dry. Find a place where campers can leave their paintings to dry.



STEP-BY-STEP DIRECTIONS FOR INSTRUCTORS



Group Discussion

INTRODUCTION

Welcome back to *Unleash Your Wild Side Camp!* Today you're riding waves in the ocean habitat. Make sure to pack that snorkel! Before diving into the ocean's dark depths, lead campers in a short group discussion focused around a few ocean-based animal riddles:

- Can you name animals that are found in the ocean?
- Now, I'm going to tell you a few riddles. Can you guess what ocean creature I am? (Share the octopus, shark, oyster, crab and starfish riddles found in the Background Information.)



Whole Group

FISH GOBLER

Once all the riddles have washed up on shore, head into today's first activity, Fish Gobbler.

To Play:

1. Find a large open area. Designate a start and stop line on either side of the playing area.
2. Choose one or two fish gobblers. The fish gobblers stand in the middle of the playing area.
3. The rest of the campers stand at one end.
4. The fish gobblers call out a "safe command" such as "Little fish, little fish, swim across the ocean." Commands could also be crawl, hop or run. The fish gobblers cannot chase the fish during safe commands.
5. At any point, the fish gobblers can call out a "dangerous command," such as "Shark!" The fish must create the shape for that command.
6. When a dangerous command is called, the fish must quickly and safely create the shapes before the fish gobblers tag them. If tagged, the fish become fish gobblers. If campers make an incorrect shape or are not part of a group, they also become fish gobblers.
7. The game continues until all but one fish has been gobbled up.

Dangerous Commands:

- Shark: Two campers lie face down head-to-toe with the front camper holding their hands together above their head like a dorsal fin. The back camper bends their legs up like a tail fin.

- Octopus: Four campers stand back-to-back with their arms extended.
- Oyster: Three campers gather together. Two campers lie on their sides in the shape of a V with their hands touching. The third camper squats in between in the shape of a pearl.
- Crab: Two campers stand back-to-back with their feet shoulder's width apart. They bend down and grasp each other's' hands through the legs.
- Starfish: Five campers stand sideways in a circle with their arms connected in the middle, creating a star.
- Fish Gobbler: All fish must fall to their stomach and connect with all the other fish, creating a school of fish before they are tagged.



Group Discussion

OCEAN DISCUSSION

- The ocean is the largest habitat in the world, covering 70% of the Earth. It contains millions of different kinds of plants and animals. What else do you know about the ocean habitat? (Encourage creative thinking.)
- What is the difference between a turtle and a tortoise? (Both turtles and tortoises can swim. Turtles spend most of their time in the water. Tortoises spend most of the time on land.)
- Turtles live inside their shells. The shells are actually attached to them. Have you ever looked closely at a turtle shell? What did it look or feel like? (Shells can be hard or soft. They are covered with hexagons.)



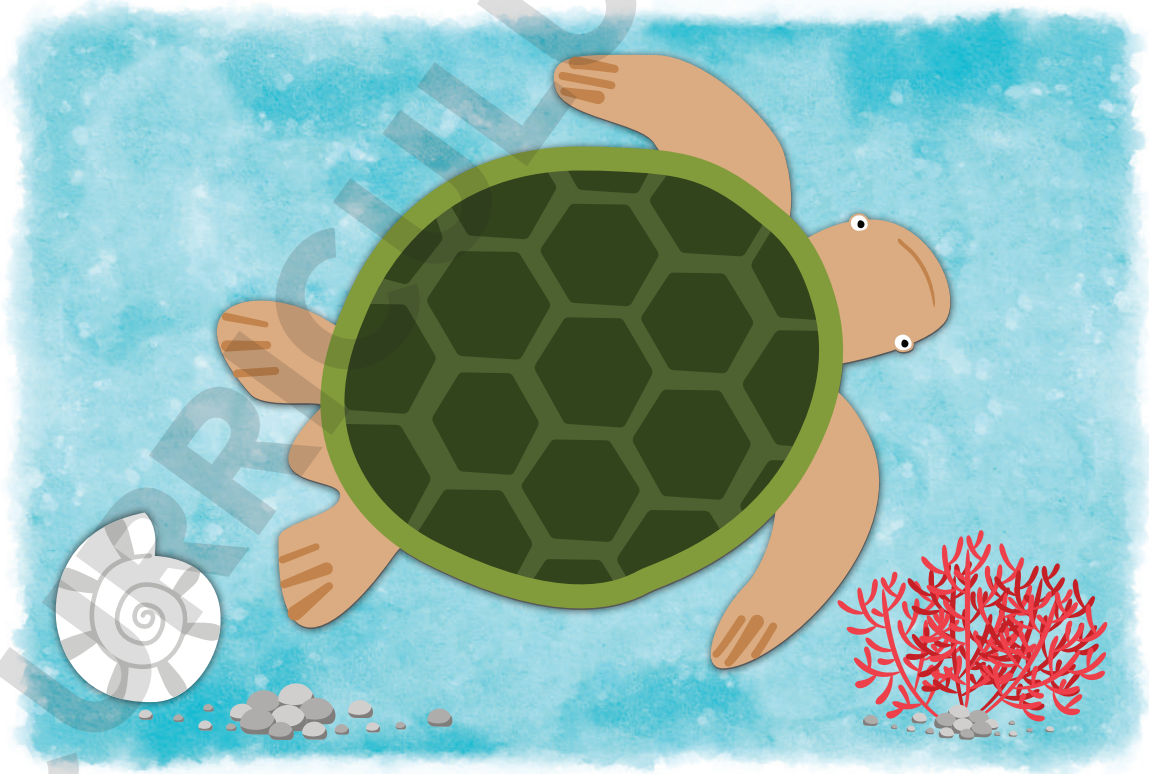
Individual

WATERCOLOR TURTLES

Now that campers are thinking about the geometry of the ocean, introduce them to the hexagon shape. Explain that a hexagon is a shape that has six sides. The hexagon shape helps give a turtle shell its strength and its curved surface. Hexagons also require less surface area, so the shell is no bigger than it needs to be. Now, pass out the Sea Turtle Template, paint brushes, pencils, wax paper, liquid watercolor concentrate, cups filled with prepared watercolor and Crayons, and head into today's sea turtle project and showcase the power of hexagons.

1. Each camper needs one Sea Turtle Template to paint.
2. Tell campers what each part of the template is — head and beak, front and back flippers, tail and shell.

3. The shell of a turtle is a round shape. Using a pencil, have campers draw a large oval inside the shell.
4. Show campers how to draw a hexagon inside the shell. Hexagons are six-sided shapes. To practice, use a piece of scrap paper. Draw an X. Then put a line through the center of the X, left to right. All of the lines should be about the same length. Now draw a line from point to point.
5. Draw hexagons inside of the shell. Start with one X and put a line through it. Now connect all of the points, making hexagons across the shell. For younger campers, the hexagons do not have to be connected. Older campers may want the hexagons to touch. Campers can also free draw the hexagons. They don't need to be perfect.
6. Use crayons to color the sea turtle. If campers have extra time, they can add to their pictures by drawing in seaweed, coral, fish or other creatures that may live in the ocean.
7. Before painting, have campers place a large piece of wax paper, newspaper or scrap paper underneath their piece of paper. This will help protect the table surface and make clean up much easier.
8. Paint the background with turquoise watercolor so it looks like sea water.
9. Before the paint dries, sprinkle salt across each camper's page. As the paint dries, the salt will soak up some of the water and create a textured design. It is okay if salt ends up over the sea turtle.
10. This project takes a while to dry. Have campers write their name on the paper and set it aside to dry. This may take over an hour.



CLEAN UP AND WRAP UP

Rinse out paintbrushes and gather leftover materials to use later. Then, have campers write journal entries to record the day's travels! Where did they travel? What kind of animals live in that ecosystem? How do those animals survive? Encourage campers to make it both a written and visual journal by including drawings along with their reflections! Check out the Journal Entry sentence starters in the Appendix if you think they might be useful for your campers.

CHECK FOR UNDERSTANDING

- Describe the ocean habitat. How big is the ocean? What is the water like? (*The ocean is huge. In some places the water is warm, others place cold and some places even frozen.*)
- What is the difference between a turtle and a tortoise? How are their habitats different from each other? (*Turtles live in water, tortoises live on land.*)
- Can you think of any other hexagons found in nature? (*Honeycomb, bubbles, snowflakes.*)

EXTENSIONS

As Big as a Whale

Map out exactly how big a whale is! For this activity, campers need a long piece of rope or string and masking tape, rulers or tape measure OR outdoor chalk and a lot of sidewalk.

Now, ask campers if they know what the largest species of whale is. (They may guess the blue whale, but the Northern Right Whale is actually 10 feet longer at 55 feet!) Explain that they will be working together to measure with a length of the rope, marking every foot with a piece of tape. After campers have measured and marked (with tape) 55 ft, ask them to stretch out the rope. Ask them what they think about the size of the world's largest whale.

Had they realized how big the Great Northern Whale is? Ask campers to predict how many campers it would take to make the length of the Northern Whale. Then, find the exact number by having campers lay down, head to toe, until they reach the length of the Great Northern Whale. Compare the actual number to predictions. End the activity by asking campers about their reactions to the size of the whale and how many campers it took to make up the length of the whale.

English Language Arts

Female sea turtles leave the ocean to lay their eggs. They crawl up onto sandy beaches and dig a hole in the sand. After they have laid all of their eggs, called a clutch, they covers up the hole and crawl back to the ocean. A female sea turtle returns to the same area every year to lay eggs. Sea turtles usually hatch after two months, normally during the night.

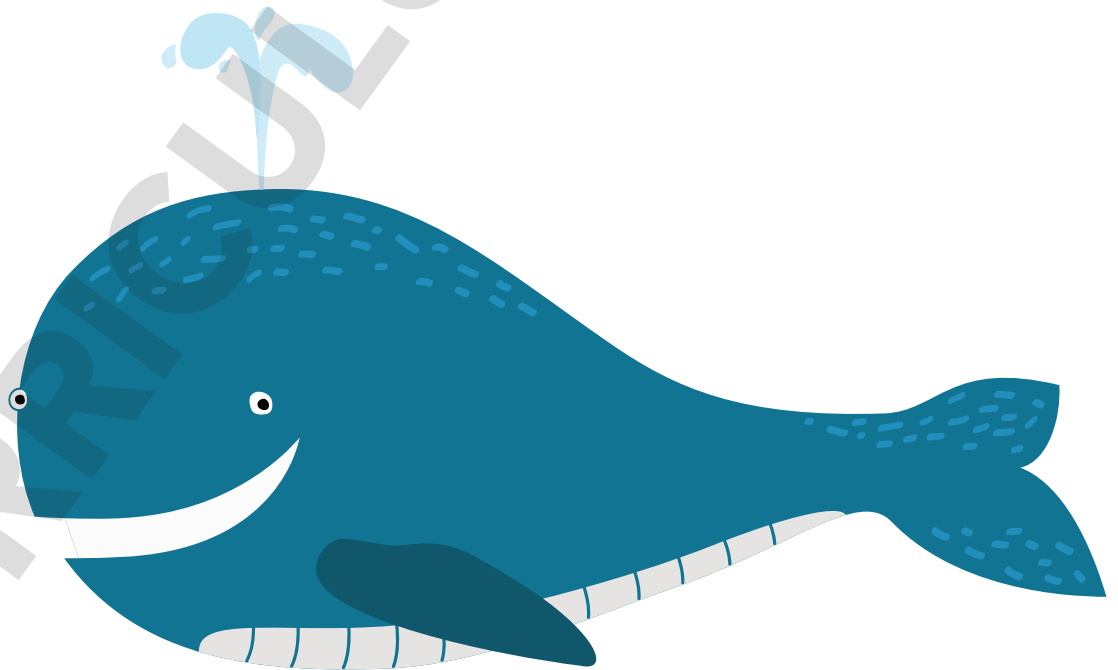
Imagine you are a baby sea turtle hatching from your egg. You need to crawl over the other eggs, hatchlings and through the sand to find your way to the water by the light of the moon. Write about your journey from hatching out of an egg to living in the ocean. If you are a female sea turtle, do you find your way back to the same beach to lay your eggs?

Bubble Geometry

What happens when two or more bubbles come together? In this activity, campers take a closer look at bubbles and how bubbles merge together in specific geometric patterns and angles. To

make bubbles, mix 1.5 cups of warm water with $\frac{1}{4}$ cup of dish soap. For stronger and bigger bubbles, add 2 tablespoons of sugar. Stir until the soap is completely mixed with the water.

- Using a wand or a straw, blow bubbles onto a flat surface such as a desk. For quicker cleanup, use wax paper.
- Have campers observe single bubbles. What shape are the bubbles? (*Spherical.*)
- Blow a number of bubbles that are the same size next to each other so they are touching. How do the bubbles change shape? (*The walls merge to share a common wall. If you look closely, the angles where the three walls meet are always 120 degrees.*)
- Blow one big bubble and one small bubble close to each other so that they merge. What happens? (*The smaller bubble bulges inside the larger bubble.*)
- Blow a large number of bubbles on the surface. What shape are the bubbles, especially those in the middle? (*Hexagonal.*)
- Explain that bubbles are always trying to minimize the surface area to be as efficient as possible. Hexagons help bubbles achieve this.
- Have fun with the bubbles. Encourage campers to blow the biggest bubble possible and measure its length. Can campers stick their fingers inside the bubbles without popping it or drop small items inside? (*To achieve this, first dip finger or object into the bubble solution.*)





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DRONES