

Grade: 3-5

Subject: Science



Get to Know Sea Turtles

Lesson Duration: 60 minutes

Teacher Information

This lesson will introduce students to the basic information about the 7 species of sea turtles. Students will learn about the body parts of a sea turtle, foods they eat, habitats that they live in, and how they interact with their environment. Main concepts of this lesson include: structure & function of body parts and ecosystem interactions & dynamics.

National Education Standards

- 4-LS1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. Students will learn the body parts of the sea turtle and the function these body parts serve.
- 5-LS2: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. Students will learn the food and habitats that each sea turtle species prefers.

Get to Know Sea Turtles

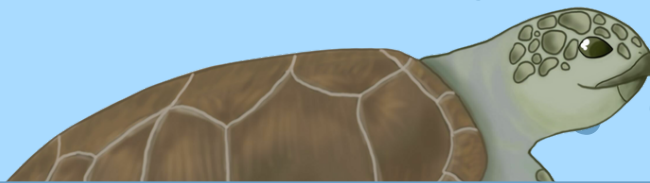
Objectives

Students will be able to:

1. Identify and describe the seven species of sea turtles.
2. Analyze the adaptations and structures that enable sea turtles to survive and reproduce.
3. Recognize the importance of sea turtles in marine ecosystems and the need for their conservation.

Materials

- Pictures of the seven species of sea turtles
- Crayons/markers
- Chart paper, chalkboard, whiteboard, or smartboard,
- Sea Turtle Species Coloring Sheets (provided)



Warm-up (5 minutes)

- Begin the lesson by asking the students if they have ever seen or learned about sea turtles. Allow a few volunteers to share their experiences.
- On chart paper, create a list with the students of what they already know about sea turtles. Where do they live? Have they seen one before? What do they eat?

Get to Know Sea Turtles

Introducing the Seven Species

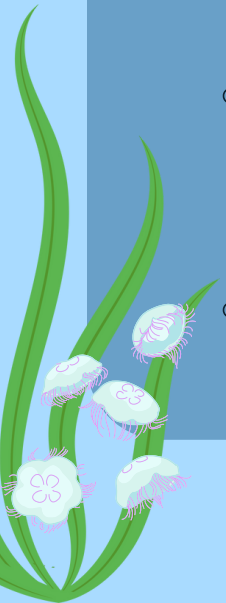
Duration: 15 minutes

- Show visual aids or posters displaying the seven species of sea turtles (Green, Loggerhead, Leatherback, Hawksbill, Kemp's Ridley, Olive Ridley, and Flatback). Discuss each species briefly, highlighting their size, distinctive features, and preferred habitats.
- Tell students that we are going to compare and contrast the different sea turtle species. This will help us learn how they are different and the same. To do this, create a chart on the board with eight columns. Label the columns with each species name and have one column for characteristics they all share. Have a reference photo of each species available for the discussion. Ask students for ideas to add to the board/paper. Encourage students to focus on the physical difference between the species.
 - Examples:
 - All sea turtles have a head, flippers, beak, and shell.
 - The color and shape of their shells are different.
 - Leatherbacks have a shell that is made of “leathery” skin while the other species have hard shells.
 - Some sea turtles are big, while others are small. Leatherbacks are the biggest and can be 4-8 ft, weighing 500-2,000 lbs. Kemp’s Rيدleys are the smallest and can be 2ft long, weighing 75-100 lbs.

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- Tell students that the different sea turtle species are also different because of what foods they prefer to eat. Some species eat the same things, while others prefer different foods. Add that the foods sea turtles eat change as they grow, just like humans. Baby sea turtles eat different foods than they will as adults. Add the following food preferences to the chart paper as you discuss each species.
 - Green sea turtles usually eat seagrass, algae, seaweeds, and other marine plant life.
 - Flatback sea turtles usually eat jellyfish, sea cucumbers, and soft corals.
 - Kemp’s ridley sea turtles usually eat crabs, fish, jellies, shrimp, and mollusks.
 - Olive ridley sea turtles usually eat crabs, shrimp, lobster, urchins, jellies, algae, and fish.
 - Loggerheads usually eat hard-shelled marine animals (known as “crustaceans”) such as crabs, conchs, and whelks.
 - Hawksbill sea turtles usually eat sea sponges, as well as algae, corals, mollusks, sea urchins, small fish, and jellyfish.
 - Leatherback sea turtles usually eat jellyfish, as well as squid, fish, crustaceans, algae, and floating seaweed.



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- Discuss that something else that makes sea turtles different is the “habitats” that they typically live in. Define habitat as the home where the sea turtles typically live. Add the following food preferences to the chart paper as you discuss each species.
 - Green sea turtles usually live near seagrass beds in warm tropical waters.
 - Flatback sea turtles live near Australia in shallow, tropical waters.
 - Kemp’s ridley sea turtles usually live in areas with muddy or sandy bottoms.
 - Olive ridley sea turtles usually live in warm tropical open ocean areas.
 - Loggerheads usually live in shallow, warm water near the coast.
 - Hawksbill sea turtles usually live in coral reefs or mangroves.
 - Leatherback sea turtles usually live in the deep open ocean.

Get to Know Sea Turtles

Understanding Adaptations and Structures

Duration: 20 minutes

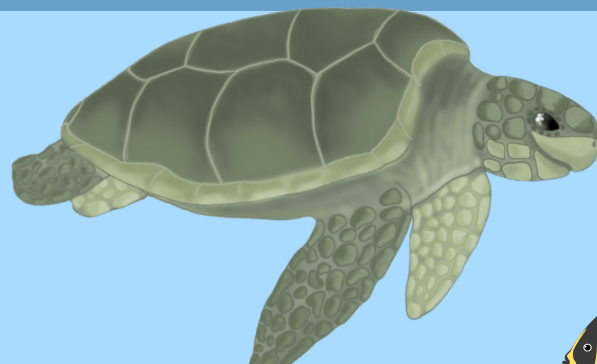
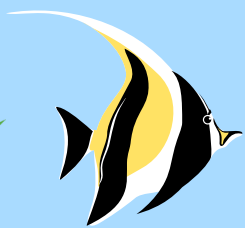
- Explain that sea turtles have unique adaptations and structures that help them survive and thrive in various marine habitats.
- Engage students in a discussion about the adaptations of sea turtles, such as their streamlined bodies, flippers, and hard shells. Show pictures or videos that highlight these adaptations and discuss how they contribute to the survival and reproduction of sea turtles.
 - Example: Flippers help them swim through the ocean, hard shells protect them, etc.
- Return to the chart paper and ask the students to look at the pictures of the various sea turtle species and describe what physical characteristics might help the different sea turtles eat their preferred food or survive in the type of habitat they typically live in.
 - Example: A hawksbills shark beak helps them eat sea sponges between rocks and corals.
- (Independent Practice) Distribute the Sea Turtle Coloring sheets to each student. You can allow students to pick the species they would like or assign each student a different species. Ask them to choose one adaptation of a sea turtle. They should label the chosen adaptation and explain its function in their own words on the back or side of the page.

Get to Know Sea Turtles

Importance of Sea Turtles in Ecosystems and Conservation

Duration: 15 minutes

- Explain to the students that sea turtles play a vital role in maintaining healthy marine ecosystems.
- Discuss the ways in which sea turtles contribute to the ecosystem, such as through their feeding habits and the dispersal of nutrients.
 - Example: Green sea turtles mainly feed on seagrass. By grazing on seagrass meadows, they prevent the grass from growing too long and suffocating on itself.
 - Example: Sponges can outcompete coral in coral reefs. By eating sponges, hawksbills help regulate sponge growth.
- Show pictures or videos of sea turtles interacting with their environment and discuss their impact on other organisms.
- Talk about the threats faced by sea turtles, such as habitat destruction, pollution, and illegal hunting. Engage students in a brainstorming session about what they can do to help protect sea turtles and their habitats. Encourage them to think of simple actions they can take in their everyday lives.



Get to Know Sea Turtles

Conclusion (5 minutes)

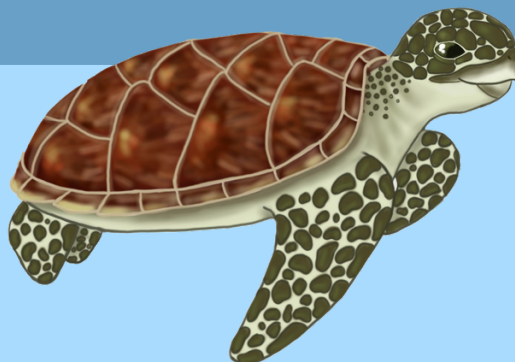
- Recap the key points discussed throughout the lesson, emphasizing the unique characteristics, life cycles, adaptations, and importance of sea turtles.
- Invite students to share one thing they found most interesting or surprising about sea turtles.
- Express the importance of taking care of our oceans and the need to protect sea turtles and their habitats.

Assessment

- Observe student participation and engagement during discussions and activities.
- Review the group chart papers or visual representations of the sea turtle life cycle.
- Review and assess student drawings and the labeled diagrams of sea turtle adaptations.
- Evaluate discussion and reflection on the importance of sea turtles in ecosystems and conservation efforts.

Extensions

- Students can conduct further research on a specific sea turtle species and create a presentation to share with the class.
- Invite a local marine biologist or sea turtle conservationist to speak to the class in person or virtually.
- Organize a field trip to a local aquarium or sea turtle rescue center.
- Encourage students to write stories or poems inspired by sea turtles and their conservation efforts.



Get to Know Sea Turtles

Resources

- Flatback:

- www.seaturtleweek.com/flatback-day
- www.conserveturtles.org/information-about-sea-turtles-flatback-sea-turtle/
- www.seeturtles.org/flatback-turtle



- Green:

- www.seaturtleweek.com/green-turtle-day
- www.fisheries.noaa.gov/species/green-turtle
- www.conserveturtles.org/information-sea-turtles-green-sea-turtle/
- www.seeturtles.org/green-sea-turtle



- Hawksbill:

- www.seaturtleweek.com/hawksbill-day
- www.fisheries.noaa.gov/species/hawksbill-turtle
- www.seeturtles.org/hawksbill-turtles
- www.conserveturtles.org/information-about-sea-turtles-hawksbill-sea-turtle/

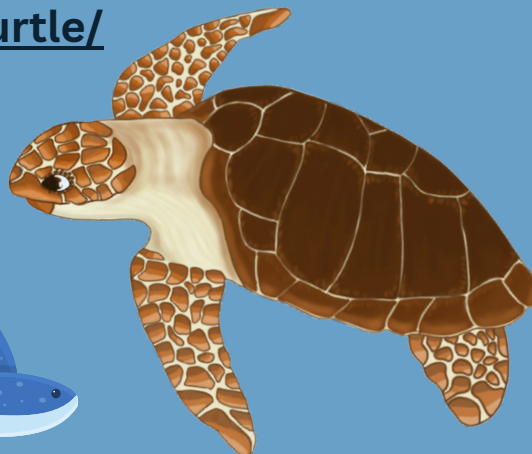
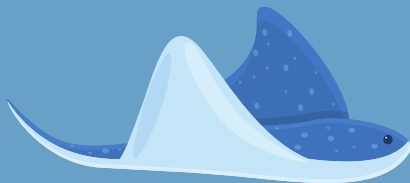
- Kemp's Ridley:

- www.seaturtleweek.com/kemps-ridley-day
- www.fisheries.noaa.gov/species/kemps-ridley-turtle
- www.conserveturtles.org/information-about-sea-turtles-kemps-ridley-sea-turtle/
- www.seeturtles.org/kemps-ridley-turtles

Get to Know Sea Turtles

Resources

- Olive Ridley:
 - www.seaturtleweek.com/olive-ridley-day
 - www.conserveturtles.org/information-about-sea-turtles-olive-ridley-sea-turtle/
 - www.fisheries.noaa.gov/species/olive-ridley-turtle
 - www.seeturtles.org/olive-ridley-turtles
- Leatherback:
 - www.seaturtleweek.com/leatherback-day
 - www.seeturtles.org/leatherback-turtle
 - www.fisheries.noaa.gov/species/leatherback-turtle
 - www.conserveturtles.org/information-about-sea-turtles-leatherback-sea-turtle/
- Loggerhead:
 - www.seaturtleweek.com/loggerhead-day
 - www.seeturtles.org/loggerhead-turtles
 - www.fisheries.noaa.gov/species/loggerhead-turtle
 - www.conserveturtles.org/information-sea-turtles-loggerhead-sea-turtle/



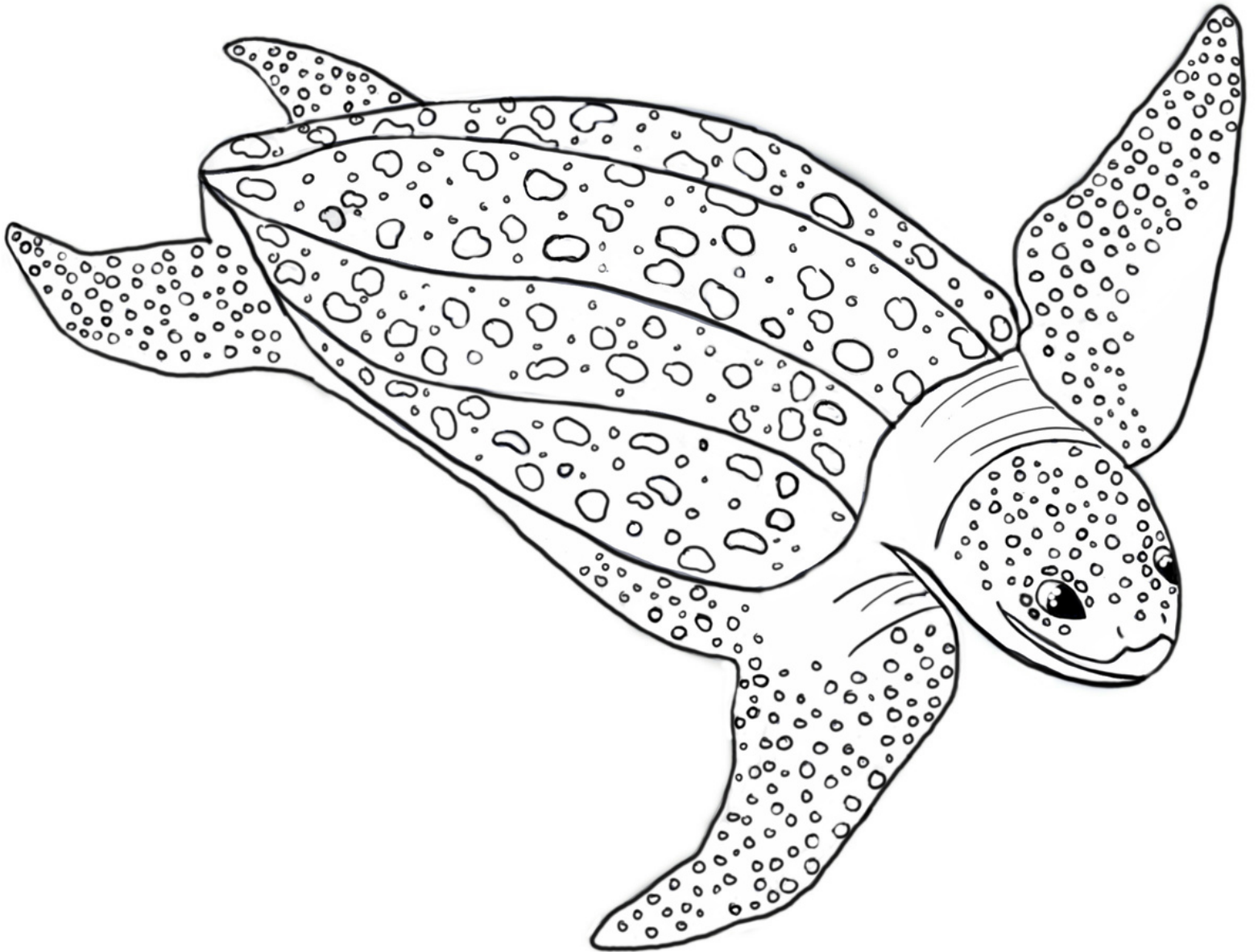
These materials are provided by SEE Turtles. SEE Turtles helps save sea turtles through conservation tours, supporting important nesting beaches, working to end demand for turtleshell, helping clean up plastic waste from turtle habitats, educating people about how to help these animals, and promoting inclusivity in the turtle community. For lesson plans, fundraising ideas, online presentations, and field trips, please visit www.seeturtles.org/schools. For more information, please contact Brad Nahill, SEE Turtles Director, at brad@seeturtles.org or 5800-215-0378.



Name: _____

Date: _____

LEATHERBACK SEA TURTLE

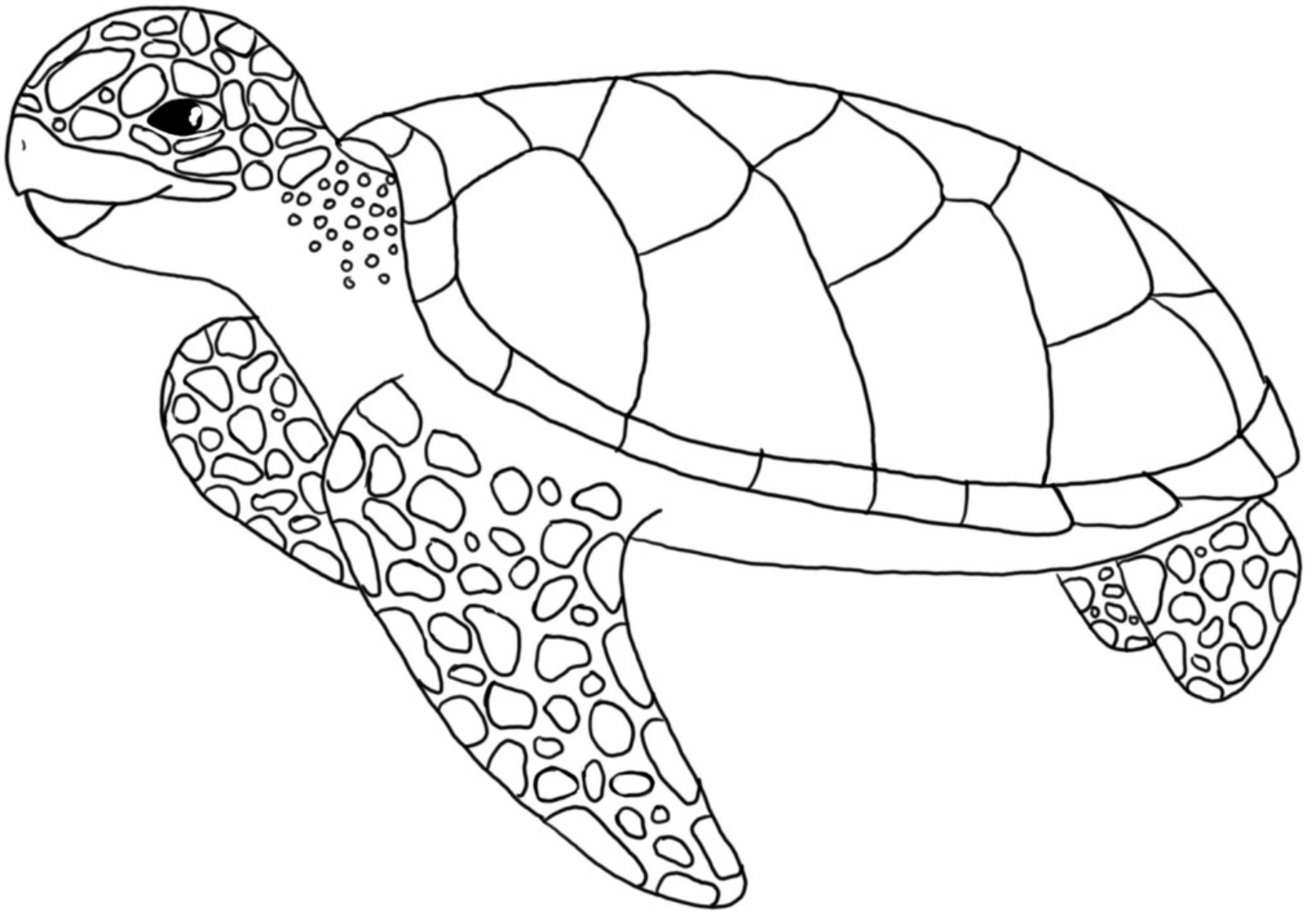


SEA TURTLE WEEK

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GREEN SEA TURTLE

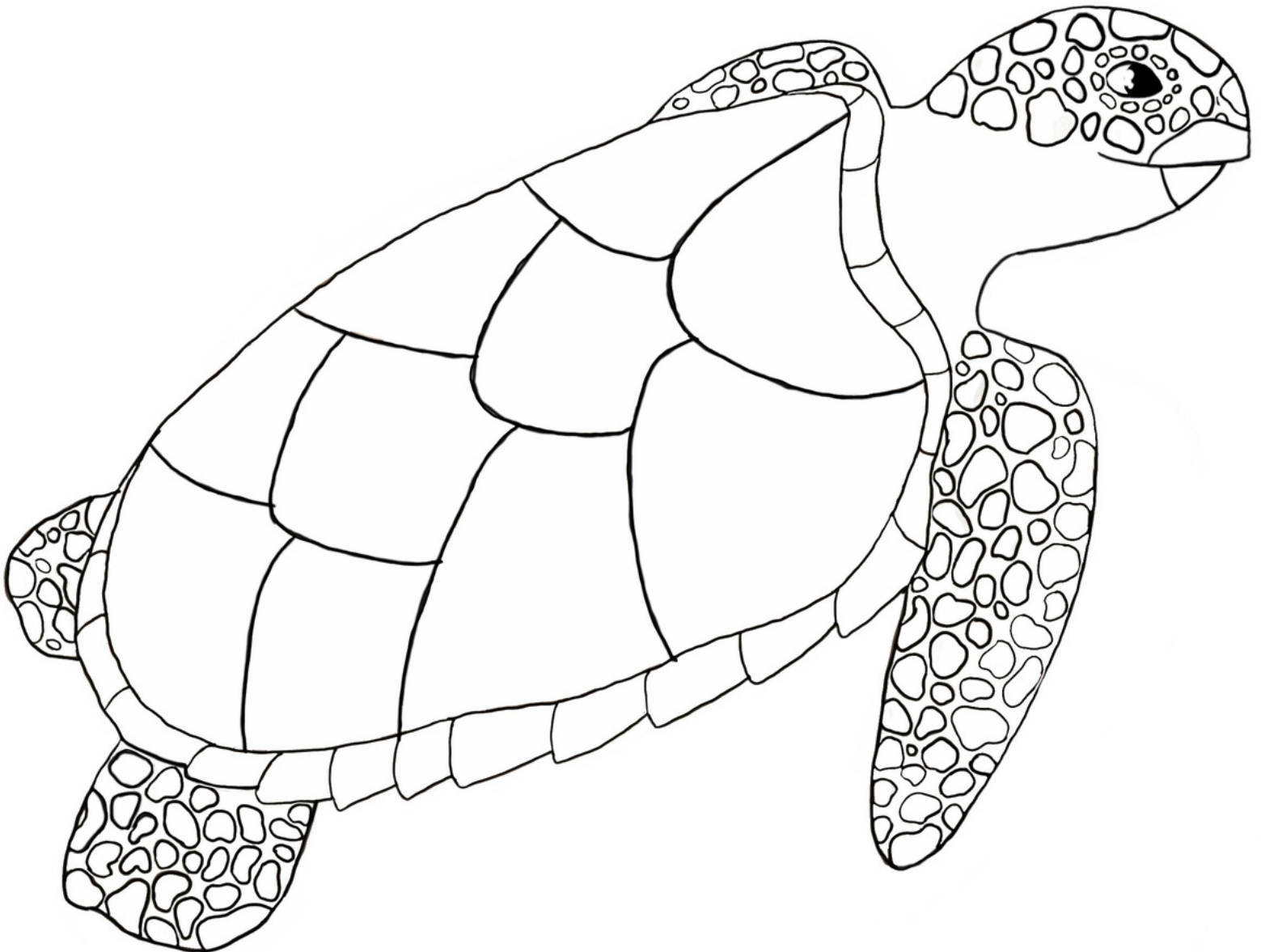


SEA TURTLE WEEK

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Date: _____

HAWKSBILL SEA TURTLE

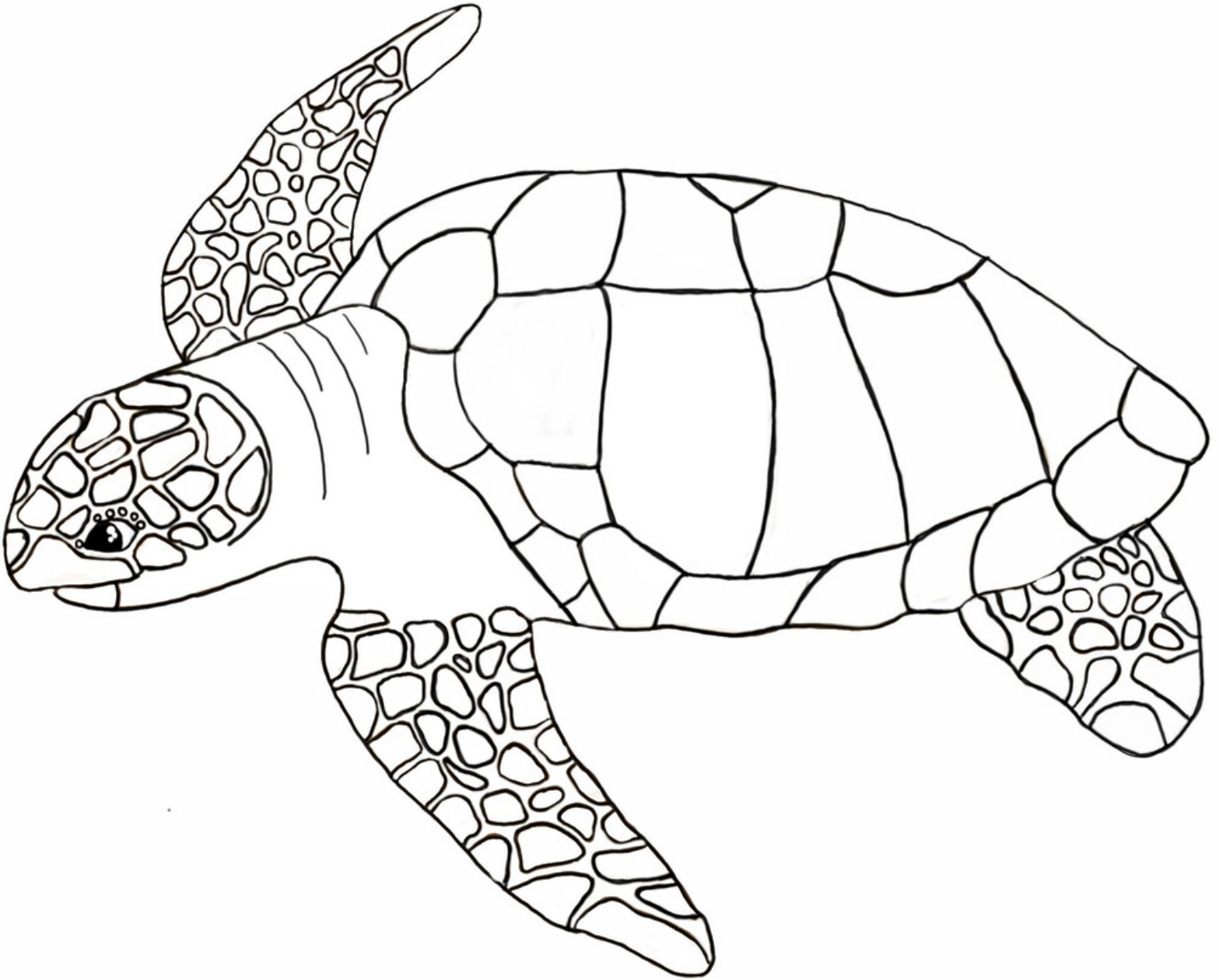


SEA TURTLE WEEK

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LOGGERHEAD SEA TURTLE

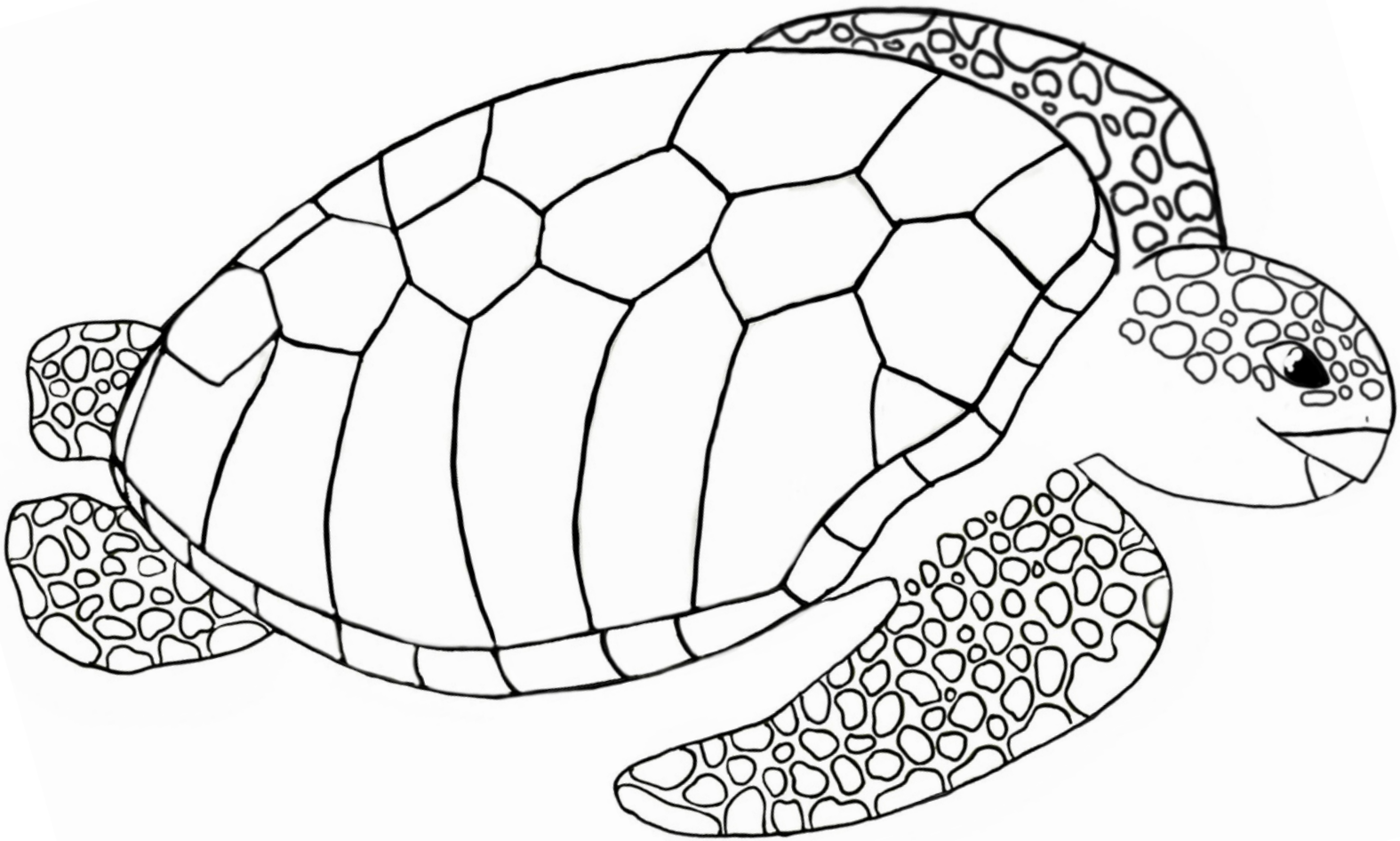


SEA TURTLE WEEK

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Date: _____

KEMP'S RIDLEY SEA TURTLE

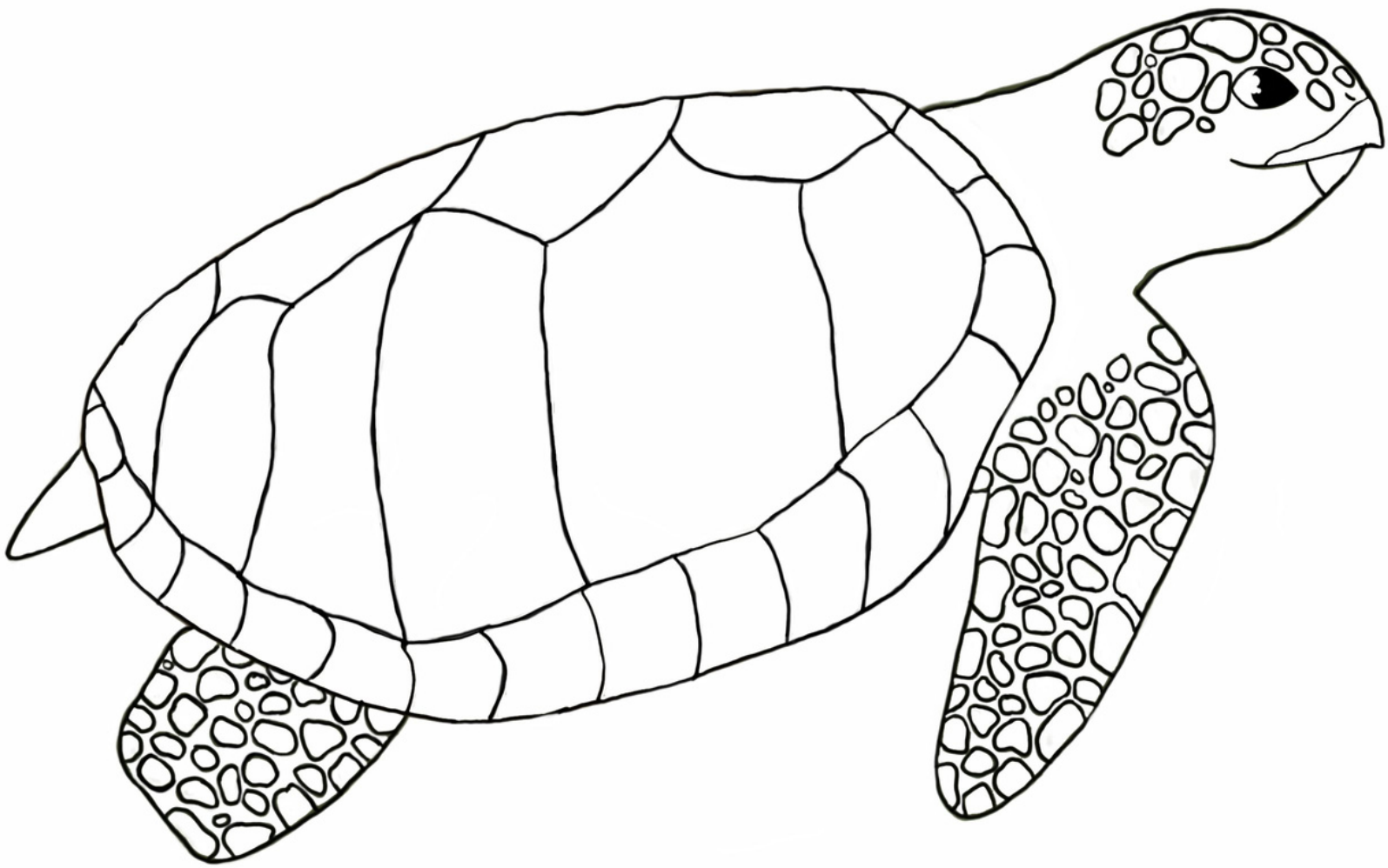


SEA TURTLE WEEK

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OLIVE RIDLEY SEA TURTLE

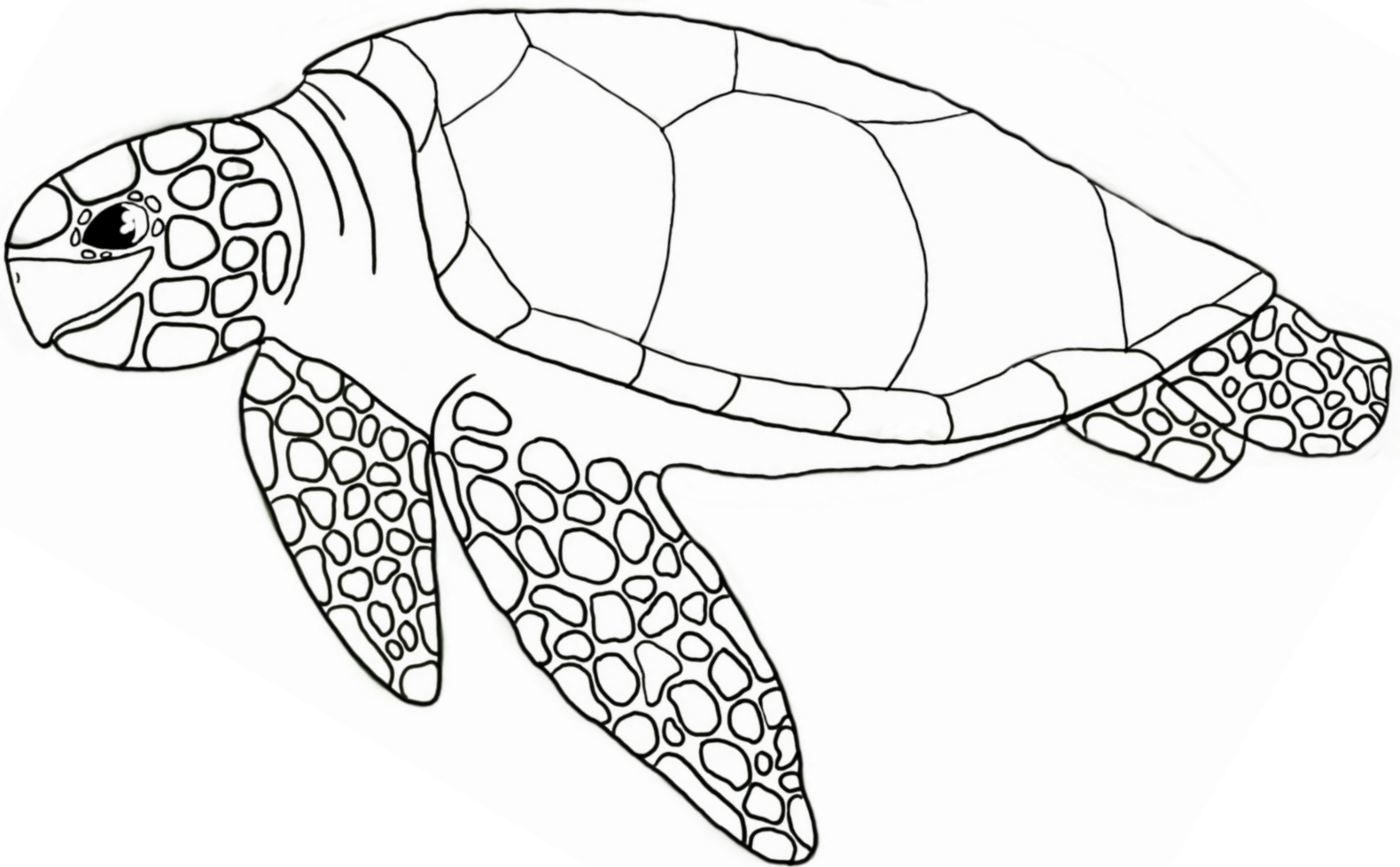


SEA TURTLE WEEK

Name: _____

Date: _____

FLATBACK SEA TURTLE



SEA TURTLE WEEK