Green Sea Turtle

Task #1
Animal Research

Climate	• Subtropical and temperate regions of the oceans • Prefers warm waters; need water over 68°F. Any cooler and the sea turtle can become stunned
What covers their body? How is this helpful?	• Skin is covered in scales • A shell, called a carapace, protects them from the bite of a predator
Social Dynamic	• Mostly solitary animals • Swims and forages alone, although may nest next to each other
Appearance	• Heart shaped shell • Small head relative to body size • Length: 3-4 ft. / Weight: 300-400 lbs. • Dark brown, gray, olive colored shells, much lighter on underside
How do they move? How would that help them in their habitat?	• Their shape and strong front flippers help them swim long distances • Back flippers help to steer
How do they care for their young?	• There is no care for young • When they hatch, baby sea turtles know where to go • Adult females will return to the same beach where they hatched to lay eggs of their own
What do they eat? What adaptations do they have to support their diet?	• Green sea turtles are the only predominantly herbivorous species of sea turtle • Eats algae, seagrass, sponges • Serrated beak on lower jaw to help tear and chew
Habitat	• Lives in salt water oceans • Chooses nesting area that has open, sandy beaches

Task #2

Green Sea Turtle Needs in a Zoo

After learning about what green sea turtles need in the wild, students are prompted to write things that green sea turtles would need in a zoo. Below are suggested answers but students are encouraged to be creative.

- Temperature controlled water and environment
- Basking area to recieve UV rays
- Structures that mimic caves or hiding spots
- Large pool
- Pool with a sandy bottom to rest
- Shore with sand
- Rocks, both in water and out of water

Green Sea Turtle Enrichment

Suggested Enrichment:

- **Environmental Enrichment-** Rocks, wooden logs, waves, rain, waterfall
- **Food Enrichment-** PVC lettuce feeder, jellyfish, urchin, crab, live bait, fish ice cubes, and plastic water cooler jug with holes containing food
- **Manipulative Enrichment-** Balls, boxes, brooms, and hard plastic toys, such as a jolly egg toy
- **Sensory Enrichment-** Scratching devices, sounds of thunder or rainfall
- **Social Enrichment-** Training sessions for vet checks and feedings with animal care specialists

Things to avoid:

- Continuous use of the same form of enrichment
- Items like translucent plastic or artificial sea grass that replicates food items
- Small enrichment or small pieces that could be ingested (string, screws, soft plastics)

Task #3
Green Sea Turtle Conservation Status

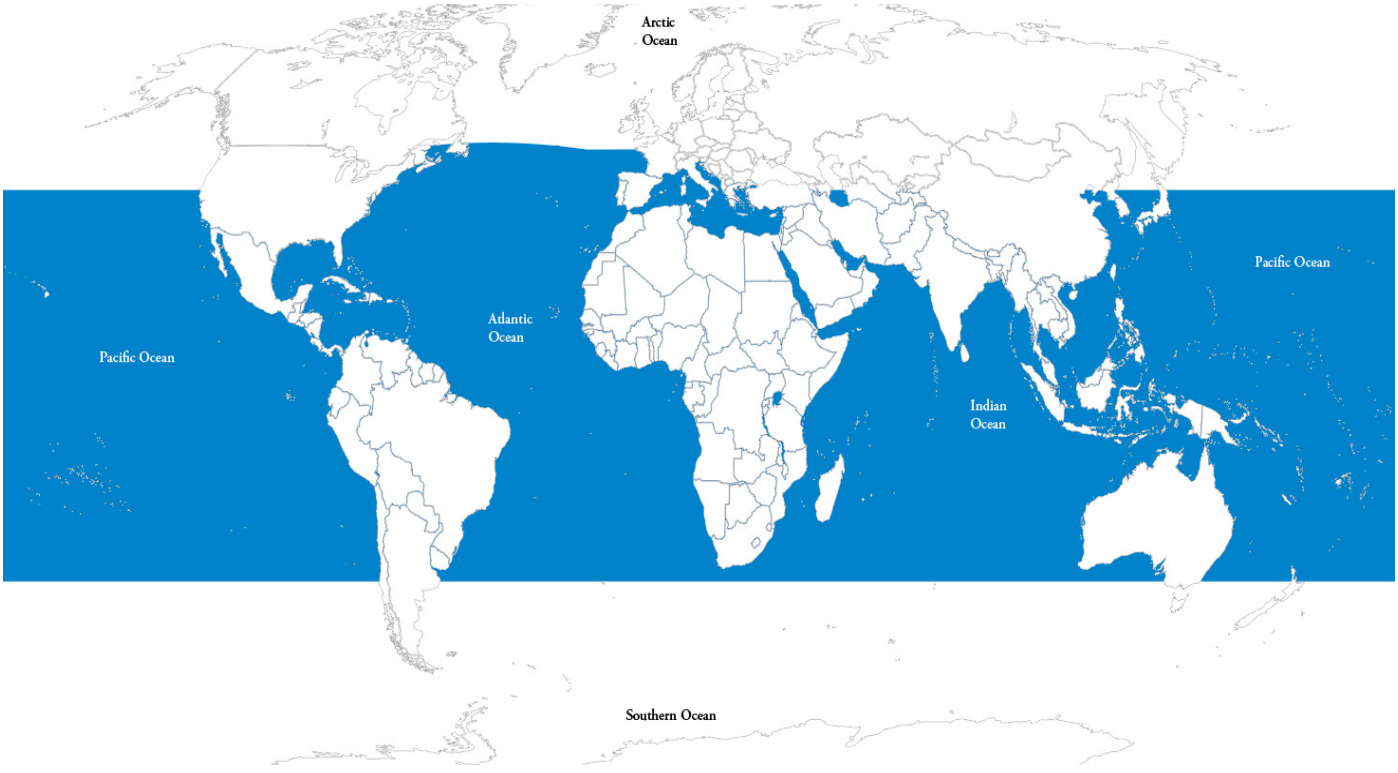
Conservation Status: Green sea turtles are listed as an Endangered Species by the IUCN.

Regions found: Green sea turtles are found in tropical and subtropical waters including regions like the Caribbean, Hawaii, the Great Barrier Reef, and the coasts of Florida, Mexico, and Africa.

Has the animal's range changed over time? While the range size has not changed much over time, climate change is affecting the sea turtles' nesting and foraging areas.

Did your animal's population change? Yes, their population has decreased.

Threats: Bycatch, habitat loss, hunting, egg theft, pollution, and climate change are all factors in the green sea turtle's population decline.



Historical / Current Range: The range of green sea turtles has not changed significantly over time. However, the green sea turtle population and available nesting sites have decreased.

Task #4
Green Sea Turtle Diet

Green sea turtles have a very unique diet. Juvenile green sea turtles are omnivores, feasting on things like jellyfish and algae. As they age they become primarily herbivores, seeking out mostly plants to eat! At the Zoo, our sea turtle's diet is the same - mostly herbivorous with some seafood mixed in. Your students have many options to choose from when creating a diet for their sea turtle and will get to plan the greens, vegetables, and seafood the turtle will be offered in a day.

Extension Activity

Students can use the extension on page 42 to create a diet plan for an entire week. Use the charts from the student guide to find the correct amounts for greens, vegetables, and seafood for each day.

Task #5
Habitat Design

Students are encouraged to design a zoo habitat that satisfies the natural behaviors of sea turtles. Below are a few suggestions.

Natural Behaviors: Nesting, hiding, exploring, swimming, basking, grazing

- The space must be at least 7 times the length of their shell and 2 times the width. For each extra turtle, the area is increased by 50%.
- The zoo habitat cannot contain any items that can be ingested, obstruct their ability to surface, or cause them to become entangled.
- Rock ledges or other habitat-mimicking items in their area helps promote resting.
- Must have a barrier of some kind to prevent the public from reaching in.
- If outdoors, it must be shaded to prevent the water temperature from becoming too warm.
- When it comes to lighting, it must have enough light for easy viewing. This can be done with natural or artificial light.
- Turtles may be housed with non-sea turtle species that are present in their natural environment.

Green Sea Turtle Diet Extension Activity

Now that you've created the sea turtle's diet for three days, you can plan the diet for the remainder of the week. Use the charts in the student guide to find the correct amounts for greens, vegetables, and seafood for each day. Remember, animals love variety!

When planning the diet for one green sea turtle, remember the following:

- Greens must weigh between 350 g and 450 g.
- Vegetables must weigh between 80 g and 125 g.
- Seafood must weigh between 40 g and 70 g.

Diet	Day 5	Day 6	Day 7
Greens (Between 350 g and 450 g)	**Total:**	**Total:**	**Total:**
Vegetables (Between 80 g and 125 g)	**Total:**	**Total:**	**Total:**
Seafood (Between 40 g and 70 g)	**Total:**	**Total:**	**Total:**