

# Lab: Sea Turtle Adventure Board Game

(Created by C. Rush w/inspiration from WWF & Leave Only Bubbles)

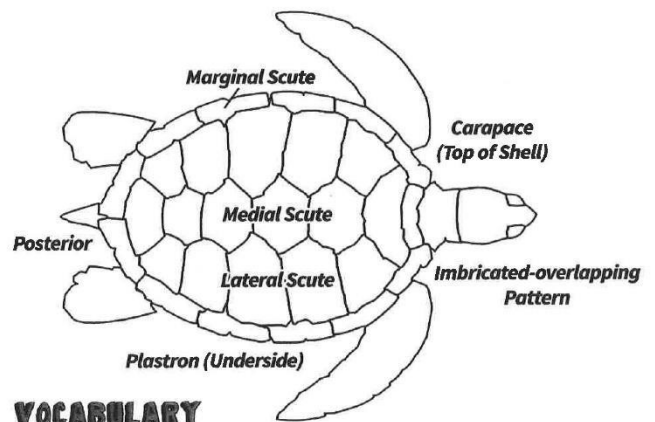
## Background:

Sea turtles are a fundamental link in marine ecosystems. They help maintain the health of seagrass beds and coral reefs that benefit commercially valuable species such as shrimp, lobster, and tuna. Sea turtles are the live representatives of a group of reptiles that have existed on Earth and traveled our seas for the last 100 million years. Turtles have major cultural significance and tourism value. Five of the seven species are found around the world, mainly in tropical and subtropical waters. The remaining two species, though, have relatively restricted ranges: Kemp's Ridley is found mainly in the Gulf of Mexico and the Flatback turtle around northern Australia and southern Papua New Guinea.

Sea turtles journey between land and sea and swim thousands of ocean miles during their long lifetimes. They wait decades until they can reproduce, returning to the same beaches where they were born to lay their eggs. Females can lay hundreds of eggs in one nesting season, yet few will yield hatchlings that survive their first year of life. Beyond these significant natural challenges, sea turtles face multiple threats caused by humans, such as bycatch in commercial fishing gear, illegal trade, consumption, and climate change. (World Wildlife Fund, 2022)

## Prelab Questions:

1. How long have sea turtles existed on Earth?
2. Which two species are NOT found worldwide?
3. Identify two threats to sea turtles.
4. Describe the difference between Marginal, Medial and Lateral scutes.
5. Where is the plastron?
6. Choose one sea turtle figure to represent you in the game. What is the sex of that sea turtle? (hint on right)



## VOCABULARY

carapace - top of shell

scute - bony external plate

marginal - on the edge

medial - pertaining to the middle

terminal - end

lateral - pertaining to the sides

posterior - back or rear

plastron - underside of shell

imbricated - to overlap in a regular pattern

beak - mouth of the turtle

*The gender of a turtle can be determined by the length of the tail. The tail of a male extends beyond the carapace; a female's tail does not.*

## Play!

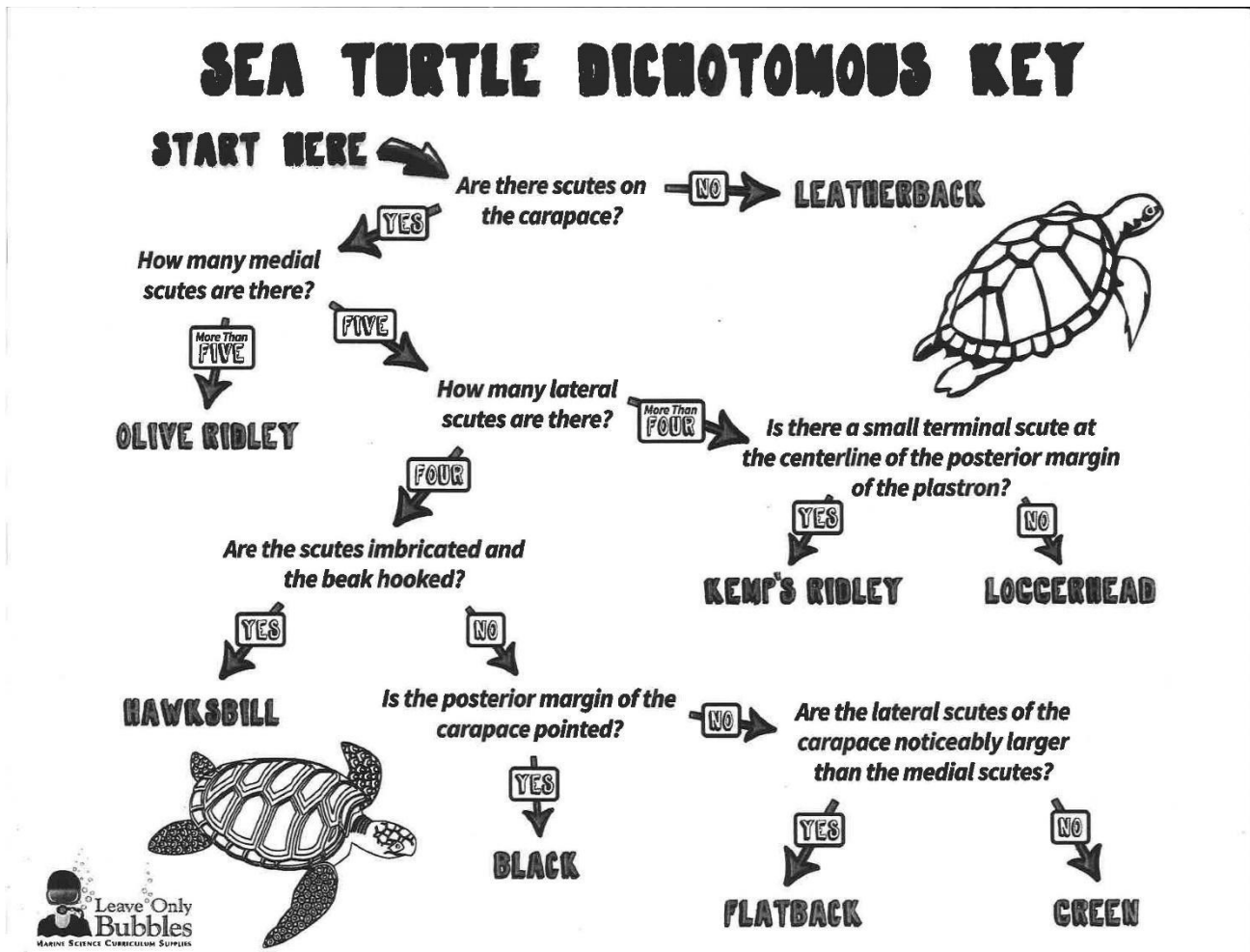
Each student chooses a sea turtle and places it at the start. Roll one die to move around the board, following the instructions on the board and the Sea Turtle Cards. The first player to complete five laps wins!



(continued on back after winner is declared)

### Post-Game Activity:

Which sea turtle species did you select for the game? You went through the whole game without knowing?!? Well, it's time to find out. Use the following dichotomous key to determine which sea turtle species you have.



### Postlab Questions:

7. Name the species of sea turtle you chose for the game.
8. Identify two events (cards) that helped you a little (moved forward one space).
9. Identify one event (card) that helped you a lot (moved forward three spaces or more).
10. Identify two events (cards) that hindered you a little (moved backward one space).
11. Identify one event (card) that hindered you a lot (moved backward three spaces or more).
12. Explain two things that humans can do to help sea turtle populations.