

SEA TURTLE DICHOTOMOUS KEY

WHAT IS A DICHOTOMOUS KEY?

A dichotomous key is a tool that can be used to identify organisms or objects in the natural world, such as plants, animals, or rocks by their unique characteristics.

HOW DOES A DICHOTOMOUS KEY WORK?

The key consists of a series of statements or clues about features or characteristics, providing a step by step guide toward identifying each entity by narrowing down the specific characteristics of that item. You must always begin at the first question in order to narrow down the identification correctly.

HOW DO I BEGIN MY TURTLE IDENTIFICATION?

- 1. Choose any turtle.*
- 2. Begin at the top of the dichotomous key, answer the question according to the turtle you chose, and follow the step.*
- 3. Continue following the steps until you can identify your turtle. Choose your next turtle, and always start at the top of the key.*

SEA TURTLE IDENTIFICATION KEY

Teachers: Models are labeled on the bottom, so you should cover the names with some masking tape and number the turtles, according to the Answer Key, before students perform the activity.

The number of scutes on head, carapace and plastron are diagnostic as to species.

Models can be sexed based upon tail length: mature male's tail extends beyond posterior margin of carapace.

#1 LEATHERBACK SEA TURTLE - MALE

Leatherback sea turtles are the only sea turtle without a shell. Its outer protection is leathery, scale-less skin raised into seven ridges.

#2 HAWKSBILL SEA TURTLE - FEMALE

Hawksbill sea turtles have long been harvested for their shells. The fashion term "tortoiseshell" is based upon their pattern.

#3 GREEN SEA TURTLE - FEMALE

Green sea turtles are the most widespread species; residing near 139 countries in the tropics and subtropics.

#4 BLACK SEA TURTLE - FEMALE

Black sea turtles are currently classified as the same species as the green sea turtle but are smaller, darker, and have a more teardrop-shaped carapace. They are also the only sea turtle to nest exclusively in the Galapagos Islands.

#5 FLATBACK SEA TURTLE - FEMALE

Flatback sea turtles get their name from their flat top shell (carapace). They are confined to the tropical areas of the Australian Shelf.

#6 LOGGERHEAD SEA TURTLE - MALE

Loggerhead sea turtles are the most common sea turtle found in the United States; with their main nesting areas found along the Atlantic coast of Florida.

#7 KEMP'S RIDLEY SEA TURTLE - MALE

Kemp's Ridley sea turtles have long been considered to be the most endangered. They are also the only sea turtle that consistently nests during the day.

#8 OLIVE RIDLEY SEA TURTLE - MALE

Olive Ridley sea turtles have the phenomenal nesting habit of emerging from the sea in large groups onto their nesting beach.

If you would like additional sea turtle information we highly recommend you explore the following site: <http://www.seeturtles.org/classroom-resources/> They share educational videos, facts sheets, a link to lesson plans, and other valuable educational resources.

SEA TURTLE DICHOTOMOUS KEY

START HERE →

Are there scutes on the carapace?

NO →

LEATHERBACK

YES →

How many medial scutes are there?

More Than FIVE →

OLIVE RIDLEY

FIVE →

How many lateral scutes are there?

More Than FOUR →

Is there a small terminal scute at the centerline of the posterior margin of the plastron?

YES →

KEMP'S RIDLEY

LOGGERHEAD

NO →

Are the scutes imbricated and the beak hooked?

YES →

HAWKSBILL

Is the posterior margin of the carapace pointed?

YES →

BLACK

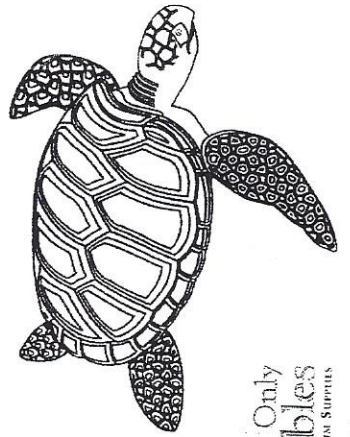
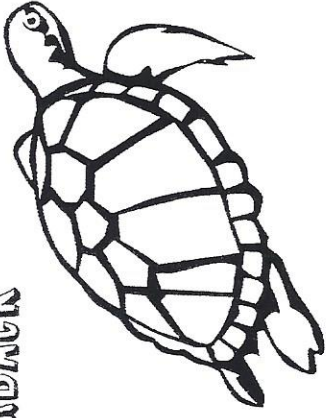
Are the lateral scutes of the carapace noticeably larger than the medial scutes?

YES →

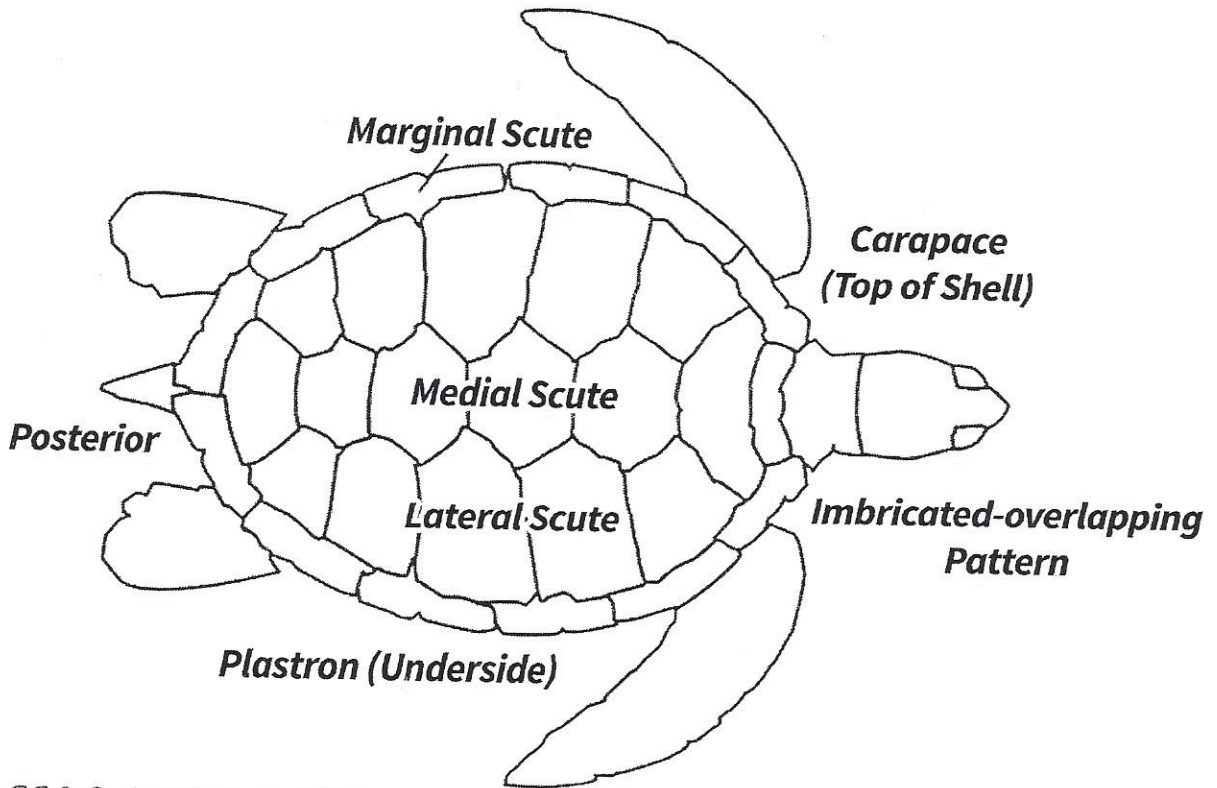
FLATBACK

NO →

GREEN



ANSWER SHEET



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

ANSWERS

Place your answers next to the corresponding number.

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. Circle M or F.

1.	M F	2.	M F
3.	M F	4.	M F
5.	M F	6.	M F
7.	M F	8.	M F