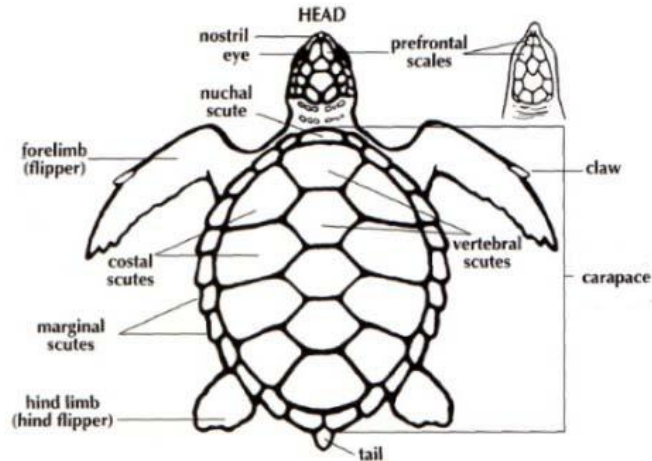


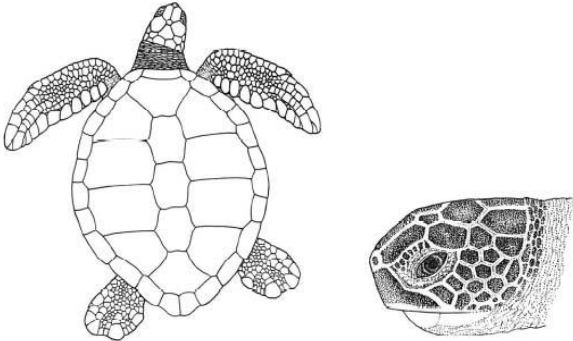
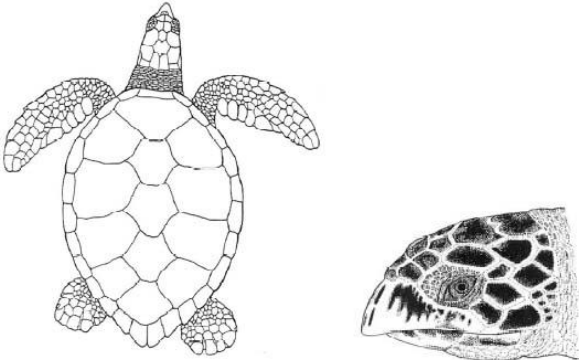
# Florida Sea Turtles

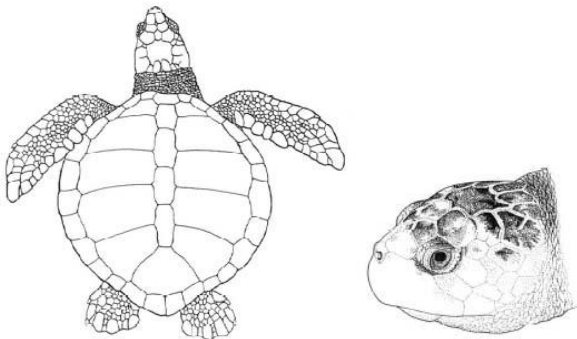
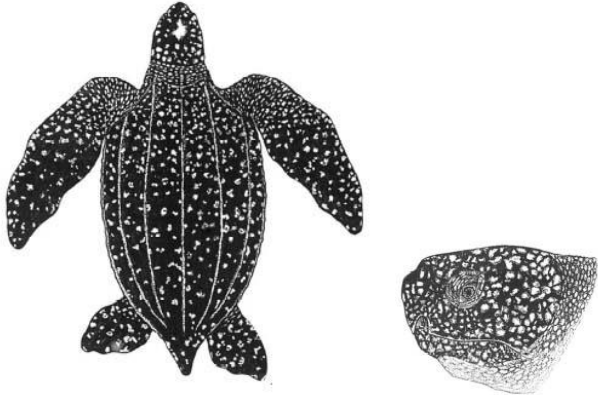
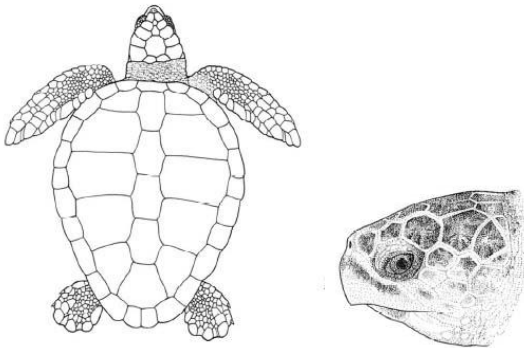
## Dichotomous Key - Answers

**Directions:** Using the following descriptions, create a dichotomous key that will allow you to correctly identify the 5 sea turtles which can be found off Florida's coast.

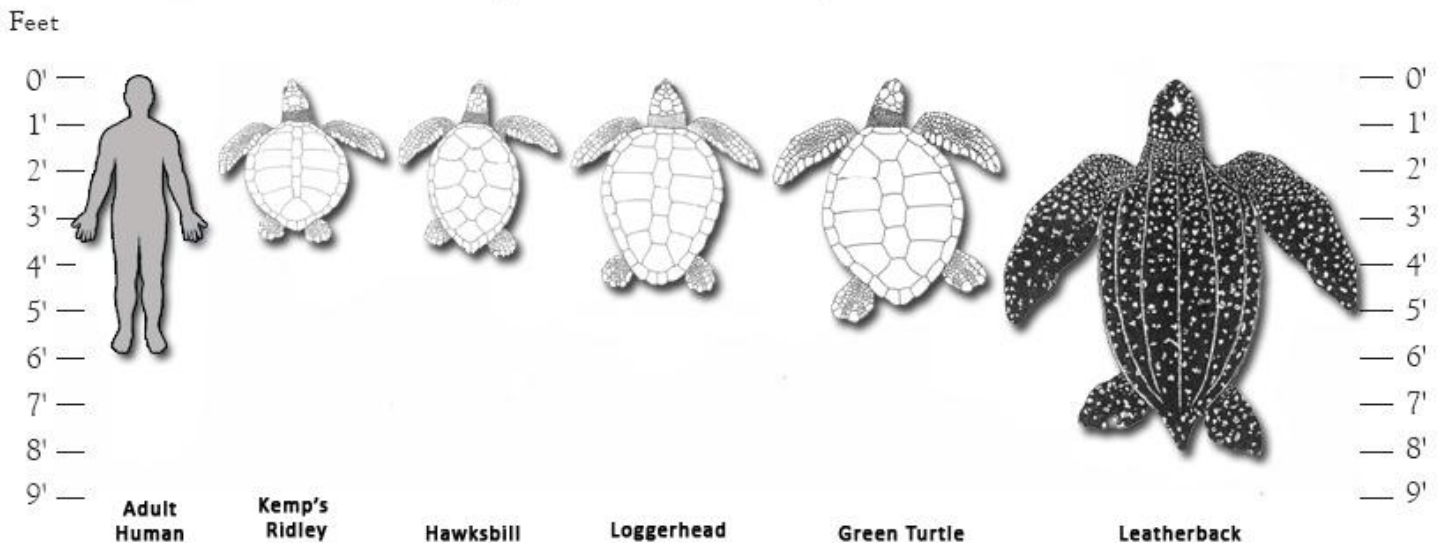
### Dorsal View



Sea Turtle	Picture	Description
Green		<u>Coloration:</u> Radiating streaks, brown, buff <u>Carapace:</u> 4 costal scutes <u>Length:</u> 120cm <u>Head:</u> round face, serrated jaw, 1 pair elongated prefrontal scales
Hawksbill		<u>Coloration:</u> amber and brown streaks <u>Carapace:</u> 4 costal scutes, overlapping and oval <u>Length:</u> 90-110+cm <u>Head:</u> curved beak, distinct overbite, 2 pair of prefrontal scales

Kemp's Ridley		<p><u>Coloration</u>: gray to light olive green</p> <p><u>Carapace</u>: round, 5-6 costal scutes</p> <p><u>Length</u>: 70cm</p> <p><u>Head</u>: triangular, relatively large, 2 pair of prefrontal scales</p>
Leatherback		<p><u>Coloration</u>: dark gray/black with white spots</p> <p><u>Carapace</u>: tapered, leathery with 5 ridges</p> <p><u>Length</u>: 165-190+cm</p> <p><u>Head</u>: tooth-like notch on either side of upper jaw, no scales</p>
Loggerhead		<p><u>Coloration</u>: reddish brown/brown</p> <p><u>Carapace</u>: longer than wide, 5 or more costal scutes, first pair very small</p> <p><u>Length</u>: 90-110+cm</p> <p><u>Head</u>: large head, 4 or more prefrontal scales</p>

## Florida Species Size Comparison Chart

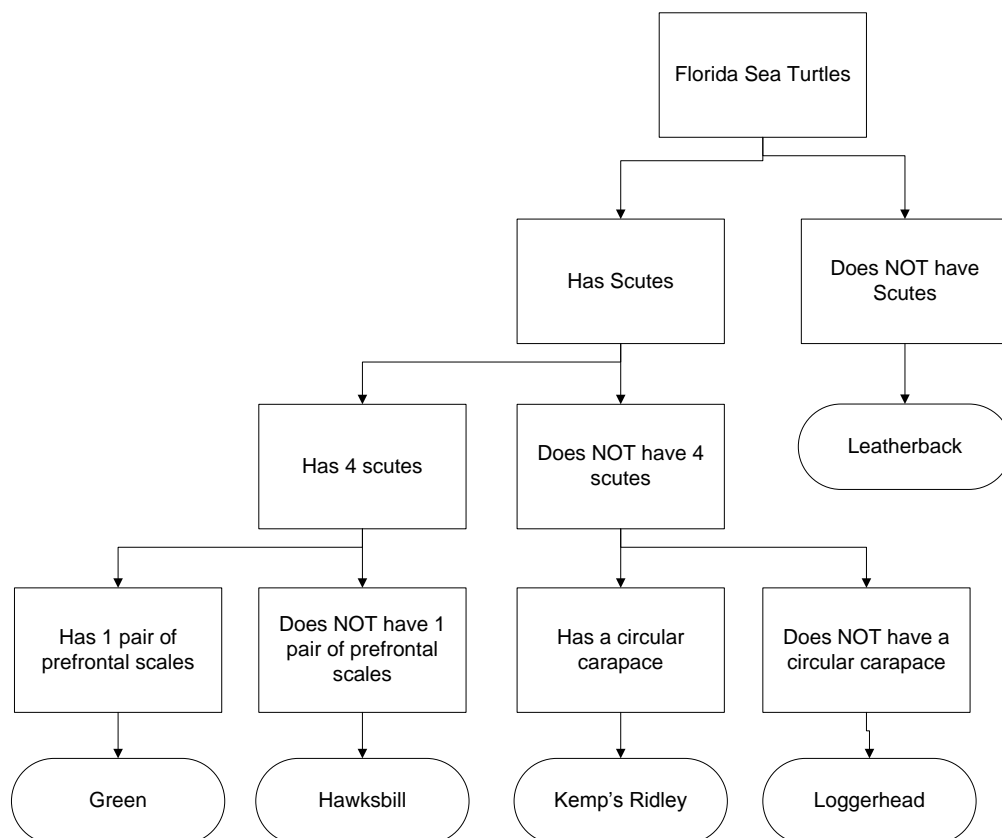


## Florida Sea Turtles Dichotomous Key

Description	Identification
1a. Has scales	a. go to 2
b. Has no scales	b. Leatherback
2a. Has 4 scutes	a. go to 3
b. Does not have 4 scutes	b. go to 4
3a. Has 1 pair of prefrontal scales on head	a. Green
b. Does not have 1 pair of prefrontal scales on head	b. Hawksbill
4a. Has a round carapace	a. Kemp's Ridley
b. Does not have a round carapace	b. Loggerhead

## Dichotomous Key Flow Chart

Draw a flow chart, based on your dichotomous key, which will help you identify the 5 species of sea turtles found in Florida waters.



## Questions

1. **Define** dorsal: the back or posterior of a organism

**Define** scute: external plate or scale, as on the shell of a turtle

2. In your own words, **describe** how a scientist uses a dichotomist key.

Answers will vary, should describe its use as an identification tool, and give a brief summary as to how a dichotomous key uses two contrasting statements about the characteristics of an organism in an attempt to correctly identify an organism based on its physical characteristics.

3. Which sea turtle **characteristic** was most *valuable* to you when distinguishing between the different sea turtles? **Explain** why was this characteristic is useful for identification?

Answers will vary – students must choose on characteristic and explain how it is useful in identifying sea turtles; particularly its ability to draw attention to unique characteristics between the turtles.

4. Which of these sea turtles has evolved the **most unique** characteristics? **Describe** the *difference* between the characteristics of this sea turtle and the others.

The leatherback sea turtle is the most physically unique turtle of the bunch. It is much larger in size compared to the other turtles, it has a leathery carapace, and has distinct coloring- black with white spots.

5. If you were snorkeling over a reef, **explain** how you would know if you were swimming next to a *Kemp's Ridley* or *Loggerhead* sea turtle?

Answers will vary - students should refer to and use the characteristics provided to them and used in their dichotomous key to distinguish between the two turtles.

6. **Discuss** how size might affect a sea turtle's *diet, reproduction, population size* and *conservation efforts*.

Size effects a sea turtle's diet – requires more energy and thus more food, reproduction – smaller number of eggs/nest, population size – less eggs, requires more food, thus smaller population size, conservation efforts – easy targets for poachers, small number of eggs/nest

