

**Activity: Turtle anatomy comparison**

Turtle bodies have many things in common, however the specific structure of their shell, limbs, and other features vary depending on the habitat each species is found in. We will compare the shell and limb structure of aquatic turtles to understand how their behavior and morphology relate to each other.

Red-eared slider skeleton



Looking at these two turtle skeletons, compare them to find the similarities and differences.

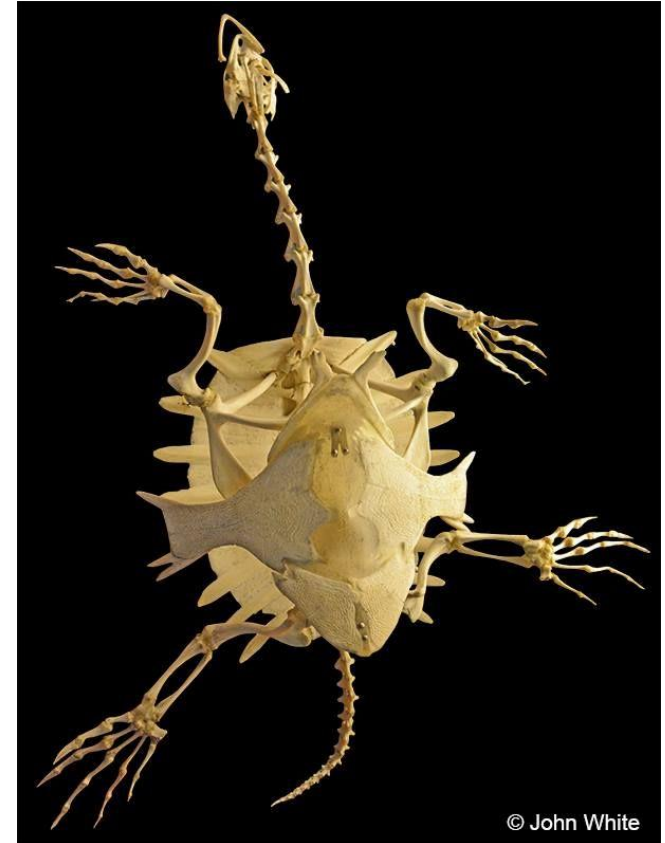
Similarities:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Differences:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Florida softshell skeleton



Discussion questions:

- What is the shell of a turtle made of?
- Do all turtle shells have the same form?
- Their shell is considered their best defense. If a turtle has a smaller shell, what other ways could they defend themselves?

Color the same limb bone in each of the three examples using the following guide:

Humerus – green

Radius – blue

Ulna – yellow

Metacarpels and phalanges (fingers) – red

The scientific names of the turtles is shown in this graphic. Here are their common names:

A. *Apalone ferox* – Florida softshell turtle

B. *Trachemys scripta* – Pond slider turtle

C. *Caretta caretta* – Loggerhead sea turtle

After coloring the bones, answer the following questions:

1. Which turtle has the longest finger bones? \_\_\_\_\_

Where does this turtle spend most of its time? \_\_\_\_\_

2. Which turtles have similar humerus bones? \_\_\_\_\_

3. The gray shading is the outline of the limb with muscle and tissue. Comparing turtles A and B, which one has a wider hand shape?

4. Considering your answers above, do you expect turtle A will spend more time in the water than turtle B? \_\_\_\_\_

5. Turtle B has 5 claws present at the end of the limb. How would this help a turtle?

Why would turtles A and C have less claws?

