

Investigation #6 - Crab Lab.

Objective:

Students will observe a crab and determine how its body structures and behaviors help it survive.

Materials:

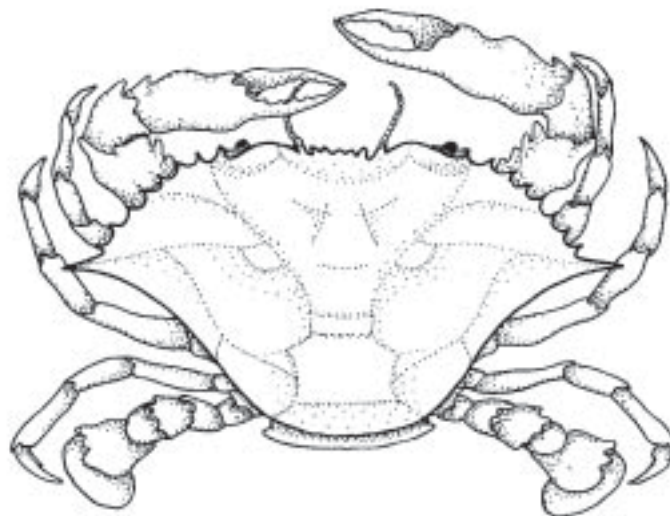
- live crabs
- container for crabs
- ruler
- activity sheet
- aquarium with sand in bottom
- saltwater

Procedure:

1. When handling crabs grasp them across the back so you don't get pinched. Demonstrate your respect for living things.
2. The teacher can demonstrate where the swimmerets are found under the abdomen flap. Gently pull back the flap to observe the feather-like appendages. Females are larger because they need to carry eggs.
3. Students in groups of 3-4 observe their crab, answering questions about the crab's structure and behaviors. (See Worksheet)

Discussion:

- A. What behaviors of the crab help it survive?
- B. How does the crab's structure help it to survive?
- C. What differences did you find between male and female crabs?
- D. Research how different types of crabs have adapted in order to survive in their habitat.



- 1) How does the crab move?

- 2) How many appendages does the crab have?

- 3) Does a crab swim? How can you tell?

- 4) Can you tell if the crab is developing new appendages? Explain.

- 5) Place the crab in the container with sand and saltwater. Watch to see how the crab digs. Explain what the crab does.

- 6) How do you think a crab obtains food?

- 7) How does a crab eat? Place a piece of food in the container and watch. Describe what you see.

- 8) Draw a detailed picture of your crab. Label its parts.

9) How does water enter the crab's body?

10) What is the purpose of the water moving through the crab?

11) Determine which sex your crab is by looking at the triangular flap on the underside of the crab.

12) Measure your crab across its back in cm. and record on your paper and on the class chart. _____cm.

Determine the width of the smallest and largest class crabs.

Smallest _____cm.

Largest _____cm.

Class average _____cm.

13) Place a pencil in between the pincers. Lift the crab about six inches off the surface. Can the crab lift its own weight with one pincer? Explain.

14) Can you lift yourself off the ground with only one arm?

15) Who is stronger, the crab or you, in relation to your sizes?

