



Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Survive the Seascapes: exploring blue crab ecosystem connections and human impacts

#### Instructions

When your teacher tells you to, open your board game and locate the “Game Instructions” sheet. Read through and follow along to begin playing. Write down your selected game board setup and fill in the table below as you play. After playing, fill out the questions below.

Gameplay Option Selected (circle one): Habitat-Rich    OR    Habitat-Limited

Life Stage	Number/Cause of Deaths (place tally marks beside the causes)	Sum Group Total Number of Deaths
Juvenile 1	Predation: _____                      Disease: _____ Fishing: _____                      Negative Energy: _____	
Juvenile 2	Predation: _____                      Disease: _____ Fishing: _____                      Negative Energy: _____	
Juvenile 3	Predation: _____                      Disease: _____ Fishing: _____                      Negative Energy: _____	
Adult 4	Predation: _____                      Disease: _____ Fishing: _____                      Negative Energy: _____	

#### Questions

1. Are you more likely to die as a juvenile or an adult? (circle 1)

Juvenile    OR    Adult

2. Fishing and Predation affect different stages of blue crabs in different ways. Circle the correct answer for each statement.

Juvenile crabs are more likely to die from:

- a. Fishing
- b. Predation

Adult crabs are more likely to die from:

- a. Fishing
- b. Predation

When fishing removes many large predators (like fish or adult crabs), what happens to juvenile crab survival?

- a. Fewer juveniles survive
- b. More juveniles survive
- c. No change

3. Compare and contrast the positives and negatives of different habitats. Were there any tradeoffs? Was it the same for adults and juveniles? (Hint: talk about the energy and shelter for each habitat and how your abilities on the crab card relate to your habitat)

4. There are both direct and indirect influences on the crab population. Sort the following 4 controls into one or more columns in the table below. (Hint: Direct = happens to the crab itself; Indirect = happens to something that affects the crab, like its habitat, predators, or prey)

Marine Heatwave                      Predation                      Fishing                      Habitat Restoration

Direct influences	Indirect Influences

5. Do humans have any control over improving or harming ecosystems? Provide an example of each from the game or real life.