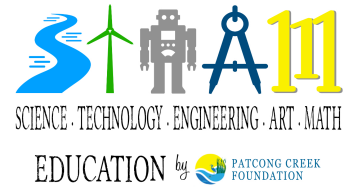




Lesson Plan



Content Area(s)	Science
Topic	The Life Cycle of a Crab (2 45-minute periods)
Grade Level	3
Seashore Center Resources	<ul style="list-style-type: none"> • Crab life cycle and anatomy graphic • How to manipulate crab traps • Crabs in tanks • Looping videos
Standards	<ul style="list-style-type: none"> • 3-LS1: Growth and Development of Organisms • LS2-D: Social Interactions and Group Behavior
Learning Target(s)	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Maintain an organized science folder • Understand the meaning of a life cycle • Define the term invertebrate and name types of same • Correctly label and the life stages of a crab • Observe various stages of a real crab
Accommodations & Modifications	<ul style="list-style-type: none"> • For ELLs and special needs students—pre-teach vocabulary and life cycle concept through images and videos • To challenge students—write down characteristics they observe on a crab
Assessment Plan	<p>Assess</p> <ul style="list-style-type: none"> • Science folder worksheets should be numbered and in order • Student can match life cycle term to diagram

Keywords	invertebrates, life cycle, zoea, megalopa, juvenile, adult, high salinity
Instructional Materials	Folder to place worksheets. SmartBoard to view life cycle diagram, diagram of Patcong Creek
Procedures	<ol style="list-style-type: none"> 1. Begin by defining the word invertebrate and showing an example: the honeybee. Ask students if they can think of other animals that are classified as invertebrates. Students will write the definition of invertebrates on a white sheet of paper that they will maintain for all vocabulary. 2. Ask students what the term life cycle means. (Life cycle means the stages a living thing goes through during its life.) Then ask for examples. Students will write the vocabulary word and definition on their vocabulary sheet. 3. Show students a picture of the Anatomy of a Blue Crab and discuss. 4. Give each student a handout of the Life Cycle of a Crab. (Explanations for the teacher on the link. Make a copy of the diagram and white out the labels beforehand.) As the teacher explains each cycle, the students can label the diagram and place it in their folders. 5. Next show photos of the differences between the male and female crab 6. Define the term high salinity. (Students will write the words on their vocabulary sheets.) Explain to students that after the female mates, she must migrate to a part of the creek that is high in salinity where the eggs are protected by grasses that grow in the area. It takes two months for an egg to hatch—this is called the zoea stage. 7. During megalops stage, the crab looks like a tiny lobster, and it will migrate into the bay where it matures. 8. Students will be assessed by labeling a life cycle sheet from a list of terms.

<p>Interdisciplinary Suggestions</p>	<ul style="list-style-type: none"> • Art—Easy Origami Crab Instructions, Make a Mosaic Using Crab Shells • LAL—If I Were a Crab (personification) • Math—Crab Symmetry • Geography—Where Do Blue Crabs Live in the World?
<p>Additional Resources</p>	<ul style="list-style-type: none"> • Life Cycle of a Crab • Crab Ecology—Activities & Handouts • Why Do Crabs Walk Sideways? • Blue Crab Comback by Lesley Ward • Chadwick the Crab by Priscilla Cummings • Blue and Bumpy by Felicia Macheske • Dancing On the Sand: A Story of an Atlantic Blue Crab by K. H. Hollenbeck

