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# Acadia Adaptations

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## Acadia National Park Quarter

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### Grades Seven and Eight

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### OBJECTIVE

The students will identify adaptations that enable organisms to survive within a specific ecosystem.



### SUBJECT AREA CONNECTION

Science



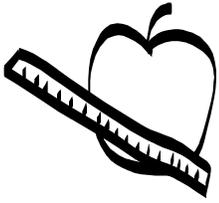
### SUMMARY

1. Display and examine the Acadia National Park Quarter design. Locate this site on a class map. As background information, explain to the students that the United States Mint began to issue the quarters in the America the Beautiful Quarters® Program in 2010. By the time the program ends in 2021, there will be a total of 56 designs on the back of the coin. Each design will focus on a different national site—one from each state, territory, and the District of Columbia.
2. Visit the Acadia National Park web site to learn more about the park’s plants and animals and how they have adapted to the changing habitats in intertidal zones.
3. Distribute the “Intertidal Zone Concept Map.” Map some facts about the Intertidal Zone. Diagram one of the animals found in the intertidal zone, such as *Mytilus edulis* (“blue mussel”) with the whole class. Focus on the adaptations of attaching to the rocks, which gives it the ability to move with the high and low tide; the hard shell, which protects it from some predators; and the high number of young born to ensure survival. Then have the students research and diagram at least three plants or animals that are found in this zone and map the ways they have adapted.



### ASSESSMENTS

- Use the students’ class participation, worksheets, and final products to evaluate whether they have met the lesson objectives.
- Create a rubric including “accuracy of information” and “making connections” and use it to assess the students’ understanding of the lesson objectives.



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## RESOURCES

- “Acadia National Park Quarter” page
- “Intertidal Zone Concept Map”
- “3-2-1 Self Evaluation” worksheet
- Acadia National Park: [www.nps.gov/acad/index.htm](http://www.nps.gov/acad/index.htm)
- Acadia Intertidal Zone: [www.nps.gov/acad/naturescience/intertidal.htm](http://www.nps.gov/acad/naturescience/intertidal.htm)
- Fact Sheets Intertidal Zones: [www.nps.gov/acad/parkmgmt/upload/gg\\_sec3\\_intertidal.pdf](http://www.nps.gov/acad/parkmgmt/upload/gg_sec3_intertidal.pdf)



Name \_\_\_\_\_

# Intertidal Zone Concept Map

**Directions:** Map some facts about the Intertidal Zone in the center oval. As a class, diagram one of the animals found in the intertidal zone. Then research and diagram at least three more plants or animals found in this zone and map the ways they have adapted.



**PLANT OR ANIMAL ADAPTATIONS**

**PLANT OR ANIMAL ADAPTATIONS**

**INTERTIDAL ZONE  
FACTS**

**PLANT OR ANIMAL  
ADAPTATIONS**

**PLANT OR ANIMAL  
ADAPTATIONS**



Name \_\_\_\_\_

# 3-2-1 Self-Evaluation

**Directions:** Evaluate your concept map using the following guides.

3: Write three sentences summarizing your concept map.

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2: Describe two adaptations and how they help the plant or animal to survive.

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1: Write one question you have about the plants and animals in the Intertidal Zone.

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# Acadia National Park Quarter



# The United States of America

