

Great Bristlecone!

Great Basin National Park Quarter

Grades Seven and Eight



OBJECTIVE

Students will investigate and understand how an organism interacts with its environment.



SUBJECT AREA CONNECTIONS

- Science
- Language Arts
- Math



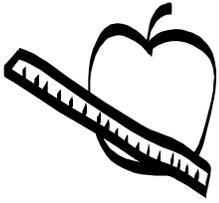
SUMMARY

1. Display and examine the “Great Basin National Park Quarter” page. Locate Great Basin National Park on a class map. Note its position in relation to your school’s location. Tell the students that the front of a coin is called the “obverse” and the back is called the “reverse.” 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. Each design will focus on a different national site—one from each state, territory and the District of Columbia.
2. Visit the Web site at www.usmint.gov/mint_programs/atb/?local=GreatBasin. As a class, examine the quarter using the zoom feature. Read the description of the design. Emphasize the information on the Bristlecone Pine and where it lives.
3. Review ecosystems and biomes with the students. Tell the students that they will be finding information on the Bristlecone Pine tree. Distribute the “Bristlecone Pine Tree Facts” worksheet. Review the directions. Have the students research using the printed texts or preselected sites on the Internet in the computer lab.
4. After the worksheets are completed, have the students design a poster on the Bristlecone Pine tree and label it with facts from their research.



ASSESSMENT

Use the “Bristlecone Pine Tree Poster Rubric” to evaluate whether the students have met the lesson objective.



Great Bristlecone!



RESOURCES

- Worksheets:
 - “Great Basin National Park Quarter”
 - “Bristlecone Pine Tree Facts”
 - “Bristlecone Pine Tree Poster, Rubric”
- An age-appropriate text that gives information on the Bristlecone Pine tree, such as:
 - *Bristlecone Pines (Wonders of the World)* by Kelli M. Brucken
 - *The Bristlecone Book: A Natural History of the World’s Oldest Trees* by Ronald M. Lanner
 - *A Day in the Ancient Bristlecone Pine Forest* by Mark A. Schlenz and Dennis Flaherty
- Age-appropriate, relevant Web sites, such as:
 - Great Basin National Park: www.nps.gov/grba/index.htm
 - Bristlecone Pine Tree Facts: www.nps.gov/grba/naturescience/treesandshrubs.htm
 - Bristlecone Pine Tree Natural History: www.fs.usda.gov/wps/portal/fsinternet!/ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gjAwhwtDDw9_AI8zPwhQoY6IeDdGCqCPOBqwDLG-AAjgb6fh75uan6BdnZaY6OiooA1t-kqlQ!!/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfMjAwMDAwMDBBODBPSEhWTjJNMDAwMDAwMDA!/?navtype=BROWSEBYSUBJECT&cid=stelprdb5138621&navid=150130000000000&pnavid=150000000000000&ss=110504&position=Not%2520Yet%2520Determined.Html&ttype=detail&pname=Inyo%2520National%2520Forest-%2520Nature



Name _____

Bristlecone Pine Tree Facts

Directions: Research the following information on the Bristlecone Pine tree and use all of it to create your poster. Fill in the boxes with your information. In the "Scale" box, calculate the scale factor or proportion of the tree to you so you can draw yourself standing next to the tree to the correct scale on the poster.



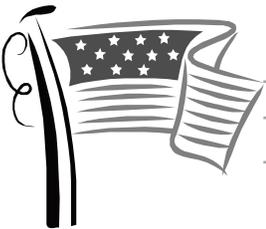
Interesting Fact	Ecosystem or Biome
Niche the Tree Fills	Five Adaptations that Help It Survive
Unique Characteristics	
Scale	



Name _____

Bristlecone Pine Tree Poster Rubric

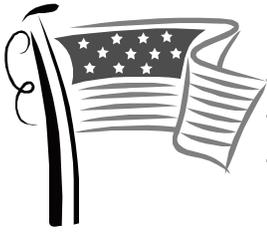
Category	4	3	2	1	Self	Teacher
Labels, Captions	Identify all structures and functions.	Identify most structures and functions.	Identify some structures and functions.	Identify few structures and functions.		
Accuracy	All details are accurate.	Most details are accurate.	Some details are accurate.	Few details are accurate.		
Drawing Scale	Is accurately calculated and clearly drawn.	Is fairly well calculated and drawn.	Is somewhat accurate and clear.	Is inaccurate or unclear.		
Spelling	No errors.	1 or 2 errors.	3 or 4 errors.	Many errors.		
Illustration	Clearly looks like the tree.	Looks like the tree.	Somewhat looks like the tree.	Barely resembles the tree.		
Required Elements	All worksheet facts are included.	Most worksheet facts are included.	Some worksheet facts are included.	Few worksheet facts are included.		
Totals						



Name _____

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Great Basin National Park Quarter



The United States of America

