

Create a Tennis Ball Globe

Students create a Tennis Ball Globe, seeing how a spherical Earth can be shown in one type of flat map.

Materials/Resources:

- Make copies of Student Handouts 1 and 2: Create a Tennis Ball Globe and Map Cut-out.

Material Warning: The Map Cut-out is appropriately sized for wrapping around a tennis ball; however, photocopy machines sometimes cause changes in scale. Check that your copies are of the appropriate size before making enough for your class(es).

- Gather the necessary materials: Scissors, Tape, Two-sided tape (if available), Tennis balls (1 per team), Tape measures, and a Globe (optional).

Time: 1 (50 minute) period

Level: Easy

Recommended Procedures:

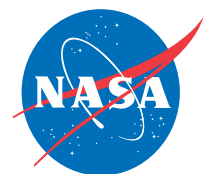
1. Have the students assemble their tennis ball globes.
2. Have students measure the circumference (in inches) of the tennis ball globe. Then have them determine the scale of their globe, using the fact that the actual circumference of Earth is approximately 25,000 miles. How many miles equal one inch? (If the tennis ball had a circumference of 10 inches, then 1 inch on the tennis ball would be equal to 2500 miles on Earth's surface.)

STANDARDS

Geography

The World in Spatial Terms

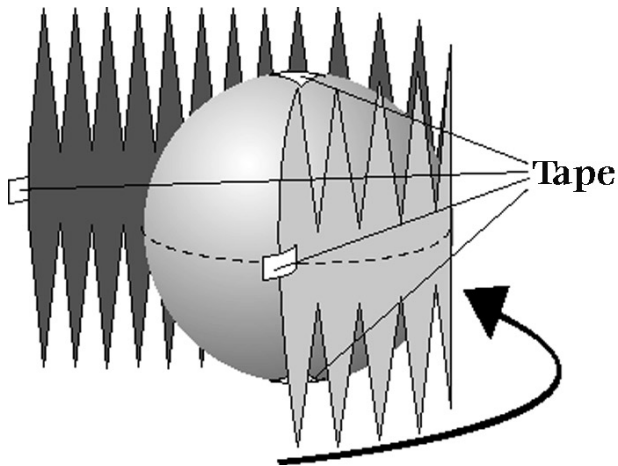
- Standard 1: How to use maps and other geographic representations, tools, and techniques to acquire, process, and report information from a spatial perspective.



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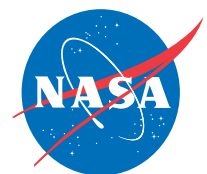
You will create a model of Earth using a flat map of Earth and a tennis ball.

1. Carefully cut out the Map Cut-out.
2. Wrap the cut-out around the tennis ball so the Equator goes around the middle of the ball.

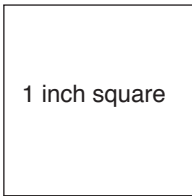
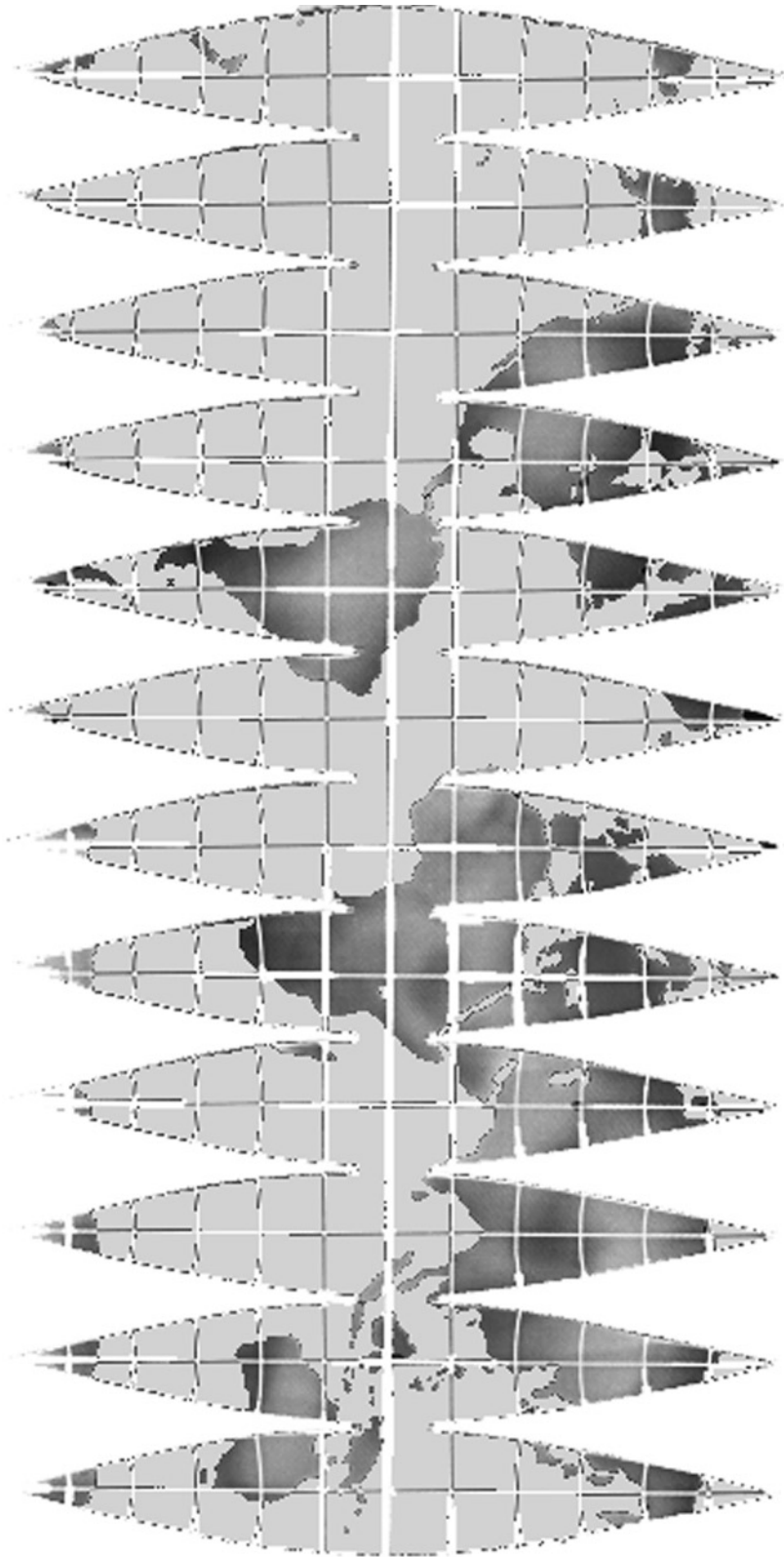


3. Tape the map together at the Equator.
4. Put a piece of two-sided or folded-over tape at each of the poles—the top and bottom of the ball.
5. Bring the points of the map together by pressing them onto the tape one by one.
6. Once all of the points are together, put a piece of tape on top of the poles to hold them in place.

You now have a spherical map of Earth on your tennis ball—a tennis ball globe!



Map Cut-out



Photocopy machines sometimes cause changes in scale. If the square above is 1 inch on each side, the Map Cut-out should fit your tennis ball.

