

Sense of Place in Pennsylvania

Adapted from: Pennsylvania Dept. of Conservation and Natural Resources (DCNR) Watershed Education program. Harrisburg, PA.

Grade Level: Basic

Duration: Minimally 20 minutes

Setting: Classroom

Summary: Students will fill in a blank map of Pennsylvania as accurately as possible with the locations and information about water resources, watershed boundaries, and other natural resource in the state.

Objectives: Students will locate watershed boundaries in the state and locate various water resources and other natural resources in PA.

Vocabulary:

Related Module Resources:

- What is a Watershed PowerPoint presentation
- Various Maps
- Posters
- Higbee Stream Map of PA
- PA Watersheds Fact sheets

Materials (Included in Module):

- Blank worksheet of just PA borders

Additional Materials (NOT Included in Module):

- Art supplies

ACADEMIC STANDARDS (ENVIRONMENT AND ECOLOGY)

7th Grade

4.1.7.B Understand the role of the watershed.

- Identify and explain what determines the boundaries of a watershed.
- Explain how water enters a watershed
- Explain factors that affect water quality and flow through a watershed.

10th Grade

4.1.10.A Describe changes that occur from a stream's origin to its final outflow.

- Identify Pennsylvania's major watersheds and their related river systems.
- Describe changes by tracing a specific river's origin back to its headwaters including its major tributaries.

12th Grade

4.1.12.B Explain the relationships that exist within watersheds in the United States.

Identify and describe the major watersheds of the United States.

BACKGROUND:

Our sense of place depends on the major features of our surroundings as well as our relationship to and understanding of those features. If one were asked to describe his/her hometown, the first descriptions might be of the manmade features such as major buildings, travel ways, industries, or centers of economic activity. A given place might also be described in terms of its topography, geology, hydrology, waterways, and watershed boundaries, natural resource availability or climate. By taking a closer look at or delving more deeply into these and other natural features of a place, we can develop a more profound understanding and a more grounded "sense of place," potentially leading to a keener sense of stewardship of and respect for that place.

OVERVIEW:

Students will fill in a blank map of Pennsylvania as accurately as possible with the locations and information about water resources, watershed boundaries, and other natural resource in the state.

PROCEDURE:

This activity is best done as a review, but it can also be a way to assess prior knowledge about Pennsylvania's watersheds, water resources, and natural resources. You can then do the activity again afterwards as review and assessment of retained information. This activity could also be used with other units you teach - i.e. Pollution units, ecology units, and geology units.

1. Distribute blank Pennsylvania map worksheets (that show only the boundary line for PA) to each student or to pairs of students. You may also pass out color pencils or markers.
2. Tell students that they will have X minutes to draw in all or some of the following (depending on what you want to review or assess):
 - Pennsylvania's major watersheds
 - Major waterways / bodies of water in the state
 - Natural resources in the state
 - Natural landmarks/significant protected areas/ parks/ forests
 - Geology information
 - Landscapes/physiographic regions
 - ANYTHING natural in the state
3. As students are working, you can review to make sure they are accurate/somewhat realistic. You may also collect the maps when they are completed for review.
4. When complete, you could have students share some of the things that they drew/indicated on their maps.
5. Ask students if they drawn anything on their maps that is not NATURAL (i.e. cities, interstate highways, human development). Ask why they put this on the map when the instructions were to only put natural things on the map. Ask if it is hard for them to orient themselves on the PA map by just using natural resources. It is interesting how much we rely on human created things (like cities, road systems) to orient ourselves or identify what exists in various portions of the state.
6. Ask students if any of them drew outside the borders of the state. Most will not have. Why not? Discuss how natural resources and watersheds and water resources are not limited to or by state boundaries. Forests, mountains, ecological ranges, geological features, and waterways extent past state borders.

DISCUSSION:

See procedure above for discussion questions.

If students completed this activity as a review and they did not do this mapping exercise before as a pre-assessment, then ask them if they think they would have had more trouble filling things in on the map had they not done some of the other unit activities.

EVALUATION:

- Collect the map and review for accuracy and content.

EXTENSIONS AND MODIFICATIONS:

- Use a blank USA map and do a similar activity.
- Have students do an oral presentation about what they placed on their map.
- Have students go back and correct their map or make additions or create a new version of the map based on other students share back.

NOTES (PLEASE WRITE ANY SUGGESTIONS YOU HAVE FOR TEACHERS USING THIS ACTIVITY IN THE FUTURE):

Activity version: June 2003

