

Mapping West Virginia's Natural Resources

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Big Ideas: Develop mapping skills to identify and diagram regions and resources of West Virginia

Essential Questions: How does geography affect natural resources in West Virginia?

Social Studies Standards

SS.3.14 label maps to demonstrate knowledge of map skills (e.g., label cardinal directions, intermediate directions, borders, continents, oceans, equator, Tropic of Cancer, Tropic of Capricorn, North Pole, South Pole and Prime Meridian).

SS.3.17 use a map scale to determine the distance between two given points.

SS.3.24 identify 4 physical regions of West Virginia, the major communities, and the natural resources in each.

SS.3.E.4 use charts, maps, and other data sources to correlate occupations with the economy and the available resources of a region. Include immigration/settlement effects of natural resources on each area.

SS.3.H.CL1.2 determine settlement patterns based on natural resources.

SS.3.E.3 sequence the path of a product from the raw material to final product.

English/Language Arts Standards

ELA.3.SL.C13.3 report on a topic or text, tell a story, or recount an explanation with appropriate facts and relevant, descriptive details, speaking clearly and at an understandable pace (CCSS.SL.3.4).

Learning Plan

Students will create a detailed map of West Virginia's 4 geographic regions and the natural resources located in each region.

Students will need background knowledge in basic mapping skills and terminology including:

Mapping Skills: Students will need to have basic map reading skills. They must have a working knowledge of terms, use of a compass rose, and the ability to determine directions using a map.

Terminology: *latitude, longitude, region, rural, urban, valley, plateau, highlands, natural resources, geographic features.*

Prior to lesson discuss: What type of information can be gathered from the use of a map? What information can be gathered from a map of geographic features? What information can be gathered from a natural resources map? How would geographic features and natural resources be related?

Initiate lesson by creating a list of natural resources in West Virginia and a separate list of geographic features in West Virginia. Create a [KWHL](#) as to how the two topics are related.

*KWHL Chart - This is a chart in which students will list what they "**K**"now, what they "**W**"ant to know, "**H**"ow the can find out, and what they "**L**"earned. The first three columns are listed at the beginning of the lesson. The fourth column is completed as the lesson progresses or at completion of the lesson.

Divide students into 4 groups (1 group/region - Allegheny Highlands, Ohio River Valley, Potomac Section, Allegheny Plateau)

Distribute individual [maps](#) of West Virginia to each group.

Assign each group the tasks:

- Locate their [region](#) on their map
- Research and list geographic features of their region
- Research and list [natural resources](#) of their region
- Create a map key for features and resources

As a class discuss/decide upon map symbols that represent various geographic features (e.g., mountains, rivers, lakes, etc.). Location of map key on individual map should be determined and explained to students (e.g., lower left-hand corner, lower right-hand corner).

Present findings to class/Add to large class map (prior to class presentations agree on symbols for map key).

Notes to the Instructor

As students are researching regions, guide students to resources necessary for collecting correct information for project completion. How will students conduct research? Using technology? Will students find their own resources, or will the teacher provide the resource? If the teacher will provide these resources, what resources will be used?

Possible resources include: WV Encyclopedia, National Geographic sites, hardback encyclopedias (if available). Question students to determine understanding of collected information while working on project and during group presentations. As students are creating large class map, assure that geographic regions are correctly placed and aligned to correspond and match up with each other.

Extended activities:

Include the effects of economic development on natural resources in each region.

SS.3.E.4 use charts, maps, and other data sources to correlate occupations with the economy and the available resources of a region. Include immigration/settlement effects of natural resources on each area.

SS.3.H.CL1.2 determine settlement patterns based on natural resources

Follow up activities:

Students choose one of West Virginia's natural resources and track its process from raw material to final product.

SS.3.E.3 sequence the path of a product from the raw material to final product.

Students write a narrative story about life in their region.

Students individually complete lesson for another state and complete a class book of all 50 states.

Materials and Other Resources

Large classroom map of West Virginia

Individual maps of West Virginia

Access to the internet, encyclopedias, atlases

Pencils, colored pencils, markers

Mapping Exercise [rubric](#)

West Virginia's Natural Resources maps: [WV Geology](#), [coal](#), [salt deposits](#), [oil and gas wells](#), [timber](#), and [watershed groupings](#)

The West Virginia Archives and History Teacher Resources [Maps, Charts and Graphs](#)

National Geographic's [Mapping Your State](#) activity