



# Mrs. Murray's Fourth Grade Science

## Navigation

[Kids In Action](#)  
[Just For Kids](#)  
[A Child Is Like A Butterfly](#)  
[Here's To Kids Who Are Different](#)  
 CHILDREN ARE:  
[Some Tornadoes are Fun!](#)  
[Scientific Investigation, Reasoning, and Logic](#)  
[All About Me!](#)  
[Earth, Moon, and Sun Systems SOL 4.7](#)  
[Weather Virginia SOL 4.6](#)  
[Energy VA Sol 4.2](#)  
[Looking at the Sky](#)  
[Making A Watershed](#)  
[Making Anemometers](#)  
**Virginia Resources SOL 4.8**  
[Paper Airplane Contest](#)  
[Digging for Coal in Chocolate Chip Cookies](#)  
[A Visit in StarLab](#)  
[One Of My Animal Friends](#)  
[Electricity and Magnetism SOL 4.3](#)  
[May the Force Be With You!](#)  
[Electricians at Work](#)  
[Fun With Circuits](#)  
[It's Shocking!](#)  
[Making Static Electricity](#)  
[Living Systems - Ecosystems SOL 4.5](#)  
[Life Processes - Plants SOL 4.4](#)  
[Sharing Pets](#)  
[Learning About the Parts of Plants](#)  
[Making and Measuring Moon Craters](#)  
[Moon Phases With Oreo Cookies](#)  
[Force, Motion, and Energy](#)  
[Find the Center of Gravity](#)  
[Building A Roller Coaster](#)

## Virginia Resources SOL 4.8



### Virginia Natural Resources Study Guide SOL 4.8

The student will investigate and understand important Virginia natural resources. Key concepts include a) watershed and water resources; b) animals and plants; c) minerals, rocks, ores, and energy sources; and d) forest, soil, and land.

#### Vocabulary:

1. **resource** - something we need, want, and use (example: water, food)
2. **natural resource** - a resource that comes from the earth (made by nature) (example: tree, soil, water, plants, animals, sun) It helps support life on earth
3. **cultivated resource** - a resource created by man (example: planting trees)(man-made)
4. **renewable resource** - a resource that can be replaced in a short period of time
5. **non-renewable resource** - a resource that cannot be replaced in a short period of time
6. **agriculture** - farming/raising (example: corn, pigs) Virginia's largest industry
7. **arable** - good (as in soil), fertile
8. **aggregates** - rocks
9. **ecosystem** - living and nonliving things in an environment and all their interactions
10. **niche** - the role of an animal/plant in its environment
11. **extinct species** - animals/plants that have died out/ no more species of that kind are on earth
12. **endangered species** - animals/plants that are very close to becoming extinct/ only a few left

- 13. threatened species** - animals/plants likely to become endangered/extinct
- 14. exotic species** - a plant/animal new to an area
- 15. over-harvesting** - taking more plants/animals than the population can withstand
- 16. habitat loss** - animals/plants losing their homes (caused by pollution, destroying homes, over hunting)
- 17. watershed** - an area of land where all water (H<sub>2</sub>O) under it or draining off of it goes into a common body of water
- 18. aquatic** - having to do with plants/animals in the water
- 19. precipitation** - water to the earth in the form of rain, snow, sleet, hail
- 20. drought** - caused by below average precipitation (not enough water)
- 21. flood** - too much water
- 22. estuary** - a place where fresh water and salt water mixes
- 23. hydropower** - electrical power produced when water is captured at a dam or created by falling water
- 24. reservoir** - a human-made lake that stores water held back by a dam
- 25. surface water** - water within the earth that supplies wells and springs
- 26. groundwater** - water that comes from the ground
- 27. sediment** - material, such as stones and sand, deposited by water
- 28. mineral** - a naturally occurring substance, neither plant nor animal
- 29. ore** - a mineral containing a useful substance that is mined from Earth
- 30. conservation** - the act of saving, protecting, or using resources wisely
- 31. pollution** - adding harmful substances to the air, water, and land
- 32. reduce** - use smaller amounts of a natural resource (example: take showers, not baths)
- 33. reuse** - use a resource over and over again (example: make a pencil holder from a can)
- 34. recycle** - turn in plastic, glass, or cans to be used again

### 1. Virginia is rich in a wide variety of natural resources.

Natural Resources	Man-Made Resources
forests	Forests are turned into: -lumber and wood for building houses, furniture, and boats -pulp for making paper -wood for heating and cooking
arable land (farmable land)	Arable land gives us: -peanuts for peanut butter or peanut oil -tobacco for tobacco products -apples for applesauce, apple cider, or apple pie

	<p>-cotton for cloth to make clothing</p> <p>Arable land also give us a place to raise:</p> <ul style="list-style-type: none"> <li>• poultry (chickens, turkeys) for food</li> </ul>
coal	<p>Coal is used to:</p> <ul style="list-style-type: none"> <li>• heat buildings</li> <li>• create electricity</li> <li>• make steel</li> </ul>
sand and rocks (aggregates)	<p>Sand and aggregates can be used in making:</p> <ul style="list-style-type: none"> <li>• roads</li> <li>• concrete</li> <li>• glass</li> </ul>
wildlife organisms (wild plants and animals)	<p>Wildlife plants and animals provide us with:</p> <ul style="list-style-type: none"> <li>• meat to eat (deer, wild turkey)</li> <li>• wildflowers to enjoy throughout Virginia</li> </ul>
aquatic organisms (plants and animals in the water)	<p>Aquatic organisms provide us with:</p> <ul style="list-style-type: none"> <li>-seafood to eat (oysters, blue crabs, shrimp)</li> <li>-fish to eat (menhaden, shad, blue fish, striped bass, perch, herring, trout, flounder)</li> <li>-animals for pets (frogs, salamanders, turtles)</li> <li>-underwater grasses (submerged aquatic vegetation) that protect shorelines from erosion</li> </ul>
clean water and clean air	<p>Clean water is used for:</p> <ul style="list-style-type: none"> <li>-transporting goods by boat or ship</li> <li>-drinking</li> <li>-hydroelectric power</li> <li>-crop irrigation</li> <li>-recreational activities</li> </ul>
beautiful scenery	<p>Beautiful scenery is throughout Virginia's flat lands, rolling hills, mountains, valleys, and plateaus.</p>

2. natural resources: a material found in nature that is useful to people

3. man-made resource: things made by people out of materials that began as natural resources

4. Virginia's water resources include

1. groundwater
2. lakes
3. reservoirs
4. rivers
5. bays
6. the Atlantic Ocean

5. Virginia has many rivers, lakes, and bays.

	Rivers	Lakes	Bays
<b>Characteristics</b>	a long, narrow body of water that flows through the land	a body of water with land all around it	a part of a large body of water that reaches into the land
<b>Examples in Virginia</b>	<ul style="list-style-type: none"> <li>• Potomac River</li> <li>• Rappahannock River</li> <li>• James River</li> <li>• York River</li> </ul>	<ul style="list-style-type: none"> <li>• Lake Drummond</li> <li>• Smith Mountain Lake</li> <li>• Lake Anna</li> <li>• John H. Kerr Reservoir (Buggs Island Lake)</li> </ul>	<ul style="list-style-type: none"> <li>• Chesapeake Bay</li> </ul>

6. A watershed is an area over which surface water (and the materials it carries) flows to a single collection place. There are 14 watersheds in Virginia; 9 of them are major ones.

1. The Chesapeake Bay watershed covers half (50%) of Virginia's land area.
2. The other two major watershed systems are the Gulf of Mexico and the North Carolina Sounds.

7. The nine major watershed "addresses" in Virginia are the:

1. Potomac-Shenandoah Rivers Watershed
2. Rappahannock River Watershed
3. York River Watershed

4. James River Watershed
5. Eastern Shore of Chesapeake Bay & Coastal Rivers
6. Chowan River Watershed
7. Roanoke River Watershed
8. New River Watershed
9. Tennessee-Big Sandy Watershed

8. Virginia has a great variety of plant and animal resources.

PLANTS	WILD ANIMALS	DOMESTICATED ANIMALS
apple trees	black bear	cats
tobacco	white-tailed deer	dogs
peanuts	squirrels	birds in cages
cotton	turkeys	cattle (dairy and beef)
corn	bald eagles	poultry (turkeys and chickens)
wheat	wild rabbits	
peach trees	beavers	
	cardinals and other birds	
	opossum	
	foxes	

9. Natural and cultivated forests are a widespread resource in Virginia.

		Why are these forests important?
NATURAL FORESTS	grow in the wild without any help from man	<ul style="list-style-type: none"> <li>• Protect stream banks and soil from erosion</li> </ul>
CULTIVATED FORESTS	planted by man for a specific purpose <ul style="list-style-type: none"> <li>• timbering</li> </ul> TREES pine	<ul style="list-style-type: none"> <li>• Protect watersheds</li> <li>• Provide food and habitat for fish and wildlife</li> </ul>

	<p>spruce fir oak maple hickory beech</p> <ul style="list-style-type: none"> <li>• reclamation of land</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the air</li> <li>• Supply raw materials for fuel, lumber, and paper</li> <li>• Give people opportunities for outdoor recreation (hiking, biking, camping, wildlife-watching)</li> </ul>
--	---	--

10. Virginia contains several important mineral resources.

MINERAL RESOURCE	DEFINITION	WHY IS IT IMPORTANT?
coal	a black or brownish black solid substance that takes thousands of years to be created; it is a natural resource widely used as a fuel	<p>burned to heat buildings</p> <ul style="list-style-type: none"> <li>• used to make electricity</li> <li>• used for making steel</li> </ul>
limestone	a rock that is formed chiefly from animal remains (shells or coral)	<ul style="list-style-type: none"> <li>• statues</li> <li>• buildings</li> <li>• roofing materials</li> <li>• blackboards</li> </ul>

<p><b>granite</b> (a type of stone)</p>	<p>a very hard rock that can be polished</p>	<p>used in buildings used in monuments crushed and used to build roads used to make bricks</p>
<p><b>sand and gravels</b></p>	<p><b>sand:</b> loose material in grains produced by the natural breaking up of rocks <b>gravel:</b> small pieces of rock and pebbles larger than grains of sand</p>	<ul style="list-style-type: none"> <li>• used to build roads</li> <li>• used to make concrete</li> <li>• used in making glass</li> </ul>

### 11. Virginia's soil and land...

<p><b>SUPPORT A GREAT VARIETY OF LIFE</b></p>	<p><b>PROVIDE SPACE FOR MANY ECONOMIC ACTIVITIES</b></p>	<p><b>OFFER A VARIETY OF RECREATIONAL ACTIVITIES</b></p>
<ul style="list-style-type: none"> <li>• people</li> <li>• domesticated animals</li> <li>• domesticated plants</li> <li>• wild animals</li> </ul>	<ul style="list-style-type: none"> <li>• farming</li> <li>• recreation</li> <li>• manufacturing industries               <ul style="list-style-type: none"> <li>○ mining</li> <li>○ transportation equipment</li> <li>○ printing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• tourism</li> <li>• boating</li> <li>• waterskiing</li> <li>• fishing</li> <li>• swimming</li> <li>• picnics</li> <li>• hiking</li> <li>• camping</li> </ul>

- **wild plants**

- **food processing**
- **chemicals**
- **industrial machinery**
- **electronics**
- **furniture**
- **lumber and wood products**
- **metal products**

- **bird-watching**
- **nature photography**

Subpages (1): [Virginia Resources SOL 4.8](#)

## Comments

You do not have permission to add comments.

[Sign in](#) | [Recent Site Activity](#) | [Report Abuse](#) | [Print Page](#) | Powered By [Google Sites](#)