

## MAPPING GRADE 1 SCIENCE INSTRUCTION

**Concept:** Conservation of Natural Resources

**PWC Strand:** Environmental Science

**PWC Objective: 1.3.1**

The student will investigate and understand that natural resources are limited. Key concepts include:

- identification of natural resources (plants and animals, water, air, land, minerals, forests, soil) **(SOL 1.8a)**
- factors that affect air and water quality **(SOL 1.8b)**
- recycling, reusing, and reducing consumption of natural resources **(SOL 1.8c)**

<b>What Students Should Know</b> (Critical Attributes)	<b>What Students Should Be Able To Do</b> (Essential Skills)
<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>• What resources does nature provide?</li> <li>• How do we use these resources?</li> <li>• How do we protect these natural resources?</li> <li>• What does pollution do to air and water?</li> <li>• What is recycling, reusing, and reducing mean when we talk about consumption of natural resources?</li> </ul> <p><b><u>Critical Attributes:</u></b></p> <p>1.8a Natural resources are the raw materials we use for such things as housing, clothing, heating, and cooking. They include the air we breathe, the water we drink, the land we farm, the plants and animals we use for food, and the space we use for living and playing.</p> <p>1.8a Natural resources are limited and cannot be renewed. Other resources are limited and cannot be renewed, but may last a very long time.</p> <p>1.8b Pollution is anything that harms the water, air, or land. Some automobiles, incinerators, coal-burning power plants, and factories send harmful gases into the air that makes the air unhealthy. Water can be harmed when we dump oil, fertilizers and other chemicals, and garbage and other wastes into it. Some pollution washes from yards, streets, and farms.</p>	<ul style="list-style-type: none"> <li>• Identify natural resources such as plants and animals, water, air, land, minerals, forests, and soil.</li> <li>• Recognize that many natural resources are limited.</li> <li>• Classify factors that affect air and water quality.</li> <li>• Determine some basic factors that affect water quality by conducting simple investigations in the school environment. Students should be able to make and record observations of what happens to runoff water on rainy days. (Related to 1.3.)</li> </ul>

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<b>What Students Should Know</b> (Critical Attributes)	<b>What Students Should Be Able To Do</b> (Essential Skills)
<p>1.8c We can practice the three R's (reduce, reuse, and recycle) to save more natural resources for the future and to prevent us from running out.</p> <p>1.8c Recycling recovers used materials. We can reuse things we no longer want or need, and we can reduce the amount we consume.</p> <p>1.8c The creation of parks can help preserve land. Parks have many uses including recreation.</p>	<ul style="list-style-type: none"><li>• Describe ways in which students and schools can help improve water and air quality in our communities.</li><li>• Compare and contrast ways of conserving resources. This includes recycling, reusing, and reducing consumption of natural resources.</li><li>• Predict what would happen if natural resources were used up, and explain ways to prevent this from happening.</li><li>• Discuss the value of parks to wildlife and people.</li></ul>