<table>
<thead>
<tr>
<th>Lesson Components</th>
<th>Description</th>
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<tbody>
<tr>
<td>Virginia Standards of Learning (VSOL)</td>
<td>Science 6.9, LS.7, LS.8</td>
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<tr>
<td>Objective</td>
<td>Students will understand:</td>
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<tr>
<td></td>
<td>• The differences between non-renewable and renewable resources</td>
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<td></td>
<td>• Pollution and its related terms</td>
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<td></td>
<td>• The differences and relationships between consumers, producers, and decomposers</td>
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<tr>
<td></td>
<td>• The relationship between predator and prey</td>
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<td></td>
<td>• The basic food chain system</td>
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<tr>
<td>Knowledge Skills and Processes</td>
<td>• Evaluate the impact of resource use, waste management, and pollution prevention in the school and home environment</td>
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<td>• Differentiate between renewable and nonrenewable resources</td>
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A **renewable resource** can be produced, grown or replaced on a scale that can sustain its consumption rate. This means that consumers (those who use the resource) do not use it faster than the resource can be replenished. Example: wood

A **non-renewable resource** is consumed quicker than it can be produced, grown or replaced. Example: coal

A **producer** is a living thing that makes its own food from sunlight, air, and soil. Green plants are producers who make food in their leaves.

A **consumer** is a living thing that cannot make its own food. Consumers get their energy by eating other organisms. All animals are consumers.

A **decomposer** is a living thing that gets energy by breaking down dead plants and animals. Fungi and bacteria are the most common decomposers.

**Smog** is a combination of fog, smoke and other pollutants found in the atmosphere.

**Hazardous waste** is waste material that poses a threat to public health and/or the environment.

**Pollution** is contaminants introduced into a natural environment that causes harm to that environment. Pollution can be chemical or energy, such as noise, heat or light.

**Toxic** refers to poisonous, deadly or dangerous substances.

**Contaminated** refers to when water or other substances become poisonous or polluted due to the introduction of toxic or hazardous substances.

**Dumping** is the depositing or disposing of garbage or waste in a careless manner that can cause contamination of the environment.
Renewable Vs. Non-Renewable

Categorize each resource below as either a renewable or non-renewable resource: Oil, Water, Clams (that the otters eat), Mice (for the Pallas cat), Gas, Water, Fossil Fuels, Coal

<table>
<thead>
<tr>
<th>Renewable</th>
<th>Non-renewable</th>
</tr>
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Learning About Pollution

Unscramble the following words, and then provide your own definition for the term. Use the glossary if you have any trouble.

1.) gmos __________
2.) nupmidg __________
3.) dauarhozs __________
4.) moneacinattd __________
5.) otxc __________
6.) noltuliop __________

Learning About Pollution

Unscramble the following words, and then provide your own definition for the term. Use the glossary if you have any trouble.

1.) gmos __________
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4.) moneacinattd __________
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The Food Chain

Number from 1 to 4, 1 being the beginning of a food chain

Producer or Consumer?

Tell whether each living thing below is a producer, consumer, or decomposer. Write P for producer, C for consumer, and D for decomposer.

Apple Tree- _________
Mushroom- _________
Lynx- _________
Carrot- _________
Dragonfly- _________
Bamboo- _________
Fox- _________
Daffodil- _________

Catfish- _________
Bacteria- _________
Barn Owl- _________
Bald Eagle- _________
Red Panda- _________
**Predator vs. Prey**

<table>
<thead>
<tr>
<th>Predator</th>
<th>Prey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Panda</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Barn Owl</td>
<td>Mouse</td>
</tr>
<tr>
<td>Eurasian Lynx</td>
<td></td>
</tr>
<tr>
<td>Asian Small Clawed Otter</td>
<td></td>
</tr>
</tbody>
</table>

Write the names of the following animals in the appropriate box.
Answer Key

Non-renewable vs Renewable
Non- Oil, Gas, Fossil Fuels, Coal
Renewable - Water, Mice, Clams

Learning About Pollution:
1. Smog
2. Dumping
3. Hazardous
4. Contaminated
5. Toxic
6. Pollution

The Food Chain
Sun is 1, grass is 2, rabbit is 3, wolf is 4

Consumer
Apple Tree - P
Mushroom- D
Lynx- C
Carrot- P
Dragon Fly- C
Bamboo- P
Fox- C
Daffodil- P
Catfish- C
Bacteria- D
Barn Owl- C
Bald Eagle- C
Red Panda- C

Predator vs Prey
Predators- Eurasian Lynx, Red Panda, Barn Owl, Otter*
Preys- Rabbit, Mouse, Otter*, Red Panda*
*Can be both