

**Land Use**

Date: \_\_\_\_\_


SWBAT: Differentiate between renewable and nonrenewable resources. Discuss the positive and negative consequences of different land uses.


Natural Resource: \_\_\_\_\_

	Renewable Resource	Nonrenewable Resource
<b>Definition</b>		
<b>Examples</b>		

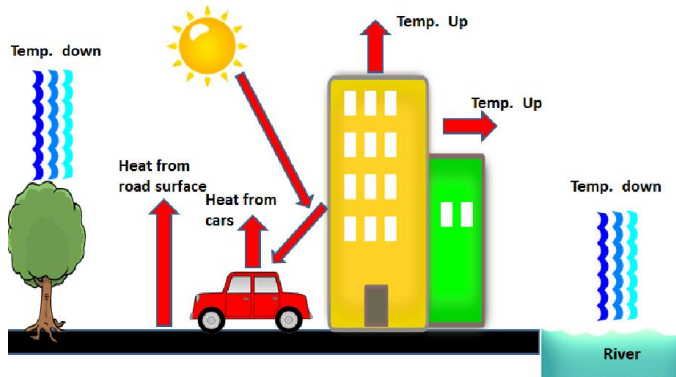
NC Forestry Resources (List 2): \_\_\_\_\_

NC Agriculture Resources (List 3): \_\_\_\_\_

Positive Consequence (2)	What is Industrialization?	Negative Consequences (3)
	<p>Introduction of: Large-scale new manufacturing, advanced technology and other money making activities into an area, society, country, etc.</p> 	


Positive Consequence (2)	What is Urbanization?	Negative Consequences (4)
	<p>New towns and cities are formed:</p> <ul style="list-style-type: none"> <li>• Population becomes larger</li> <li>• More people live and work in central area</li> </ul> 	

**Heat Islands:** A city that has \_\_\_\_\_ due to having asphalt, buildings, and other dark structures that absorb and hold heat longer than natural environments



Heat Island

Consequences of Heat Islands	Heat Island Mitigation
<p>Negative</p> <ul style="list-style-type: none"> <li>• _____ : 1-10 degree Fahrenheit</li> <li>• Increased Energy Demand</li> <li>•</li> </ul>	<p>In order to combat heat island:</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>

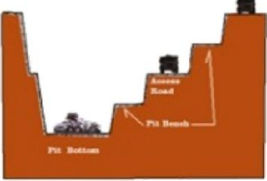

Positive Consequences (2)	What is Deforestation?	Negative Consequences (3)
	<p>Natural forests are cleared through logging and/or burning</p>  <p>Since 1970, 20% of the Amazon Rainforest has been cut down.</p>	

**Obtaining Energy Resources: Mining and Reclamation**

Date: \_\_\_\_\_

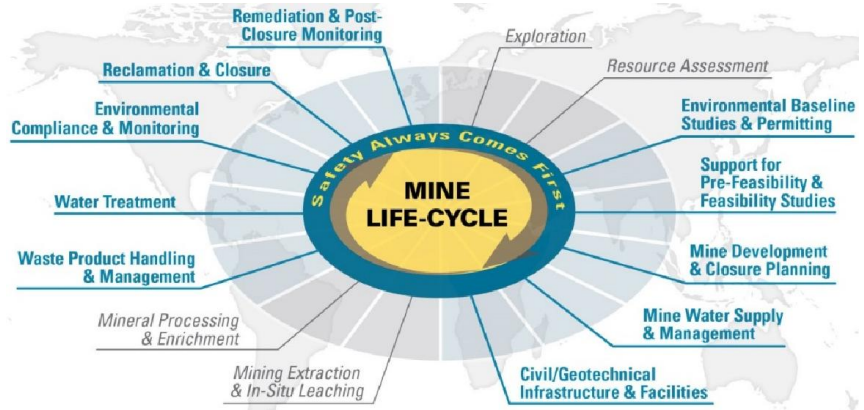
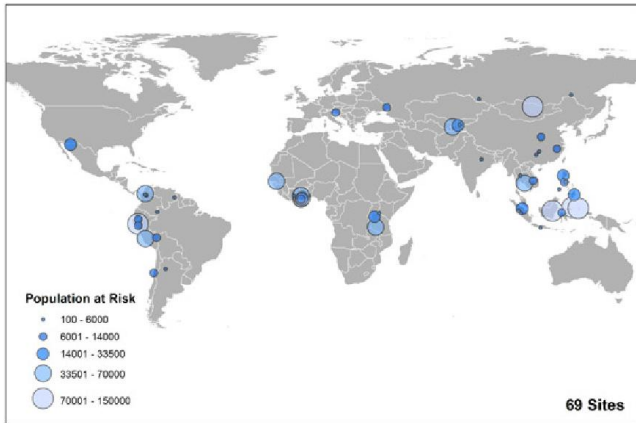
SWBAT: Discuss mining methods and restoration.

NC Mining Resources (List 3): \_\_\_\_\_

Underground Mining	Surface Mining Methods	
<ul style="list-style-type: none"> <li>• Drift Mine</li> <li>• Slope Mine</li> <li>• Shaft Mine</li> </ul>	<p>_____ : Machines are used to dig large holes in the ground and remove the ore.</p>  <p style="text-align: center;">Fig. 1</p>	<p>_____ : Huge bulldozers and other machines are used to clear away large strips of the Earth's surface.</p> 

Effects of Mining	How to reduce destructive effects...
<ol style="list-style-type: none"> <li>1. Disruption of the land's surface.</li> <li>2. Waste materials left behind.</li> <li>3. _____</li> <li>4. _____</li> <li>5. _____</li> <li>6. Uses large amounts of energy.</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Reclamation:</b> _____</li> <li>2. Re-using or recycling.</li> <li>3. _____</li> <li>4. Stiff fines or fees.</li> </ol>

**Mercury Pollution from Mining and Ore Processing**



**Obtaining Energy Resources: Fossil Fuels**

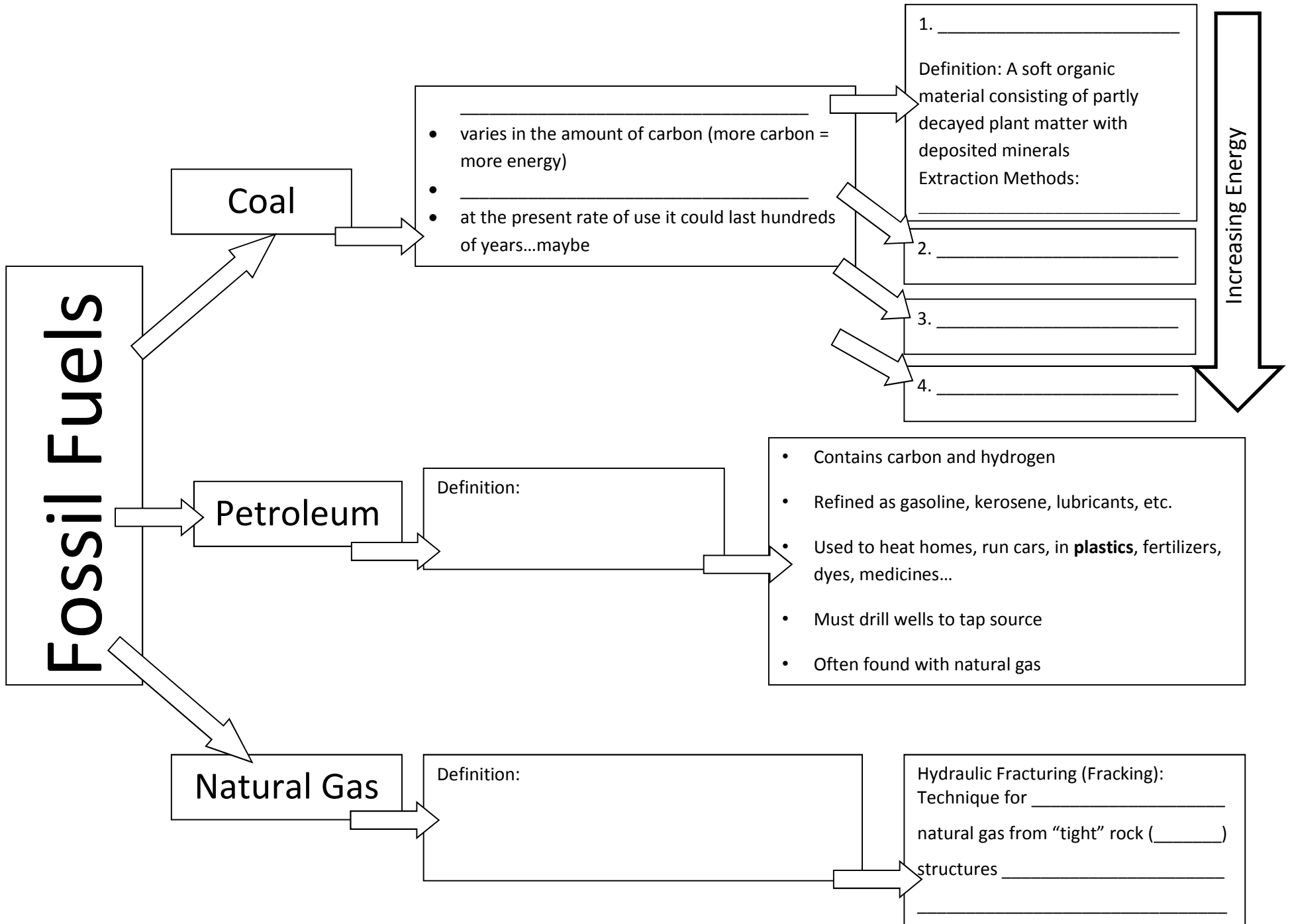
Date: \_\_\_\_\_

SWBAT: Describe fossil fuels, how they formed, and identify ways to conserve limited supplies.

**Fossil Fuels**

- Main energy sources that are formed from the remains of plants and animals.
- Energy released when burn → runs cars, machinery and generators.

Fossil fuels are also the major source of air pollution and therefore, the major contributor to global warming!



**Alternative Energy**

Date: \_\_\_\_\_

SWBAT: Identify and describe types of alternative energy.

Solar Energy:

Advantages	Disadvantages	Practical for NC?

Solar Energy Collection:

1. Active Solar – Collect solar heat
2. \_\_\_\_\_ - Southern facing windows
3. Photovoltaic Cells – Convert light into electricity
4. \_\_\_\_\_ - Focus light onto water tanks to create steam

Nuclear Energy:

Advantages	Disadvantages	Practical for NC?

Wind Energy:

Advantages	Disadvantages	Practical for NC?

Hydroelectric Energy:		
Advantages	Disadvantages	Practical for NC?

Geothermal Energy:		
Advantages	Disadvantages	Practical for NC?

Tidal Energy:		
Advantages	Disadvantages	Practical for NC?

Biomass Energy:		
Advantages	Disadvantages	Practical for NC?