

Unit Reading Material: · Hardcopy Textbook: Ch. 4 · Digital Textbook: Ch. 5.26-5.30, 8.9-8.31

**Vocabulary—Define, know, and be able to apply the following terms:**

1. Ecological Footprint
2. Fossil fuel
3. Ore
4. Sustainability
5. Deforestation
6. Urbanization
7. Overgrazing
8. Aquaculture
9. Overharvesting

**Study Guide—Answer, know, and understand the following concepts:**

1. Compare renewable and nonrenewable natural resources including rates of use vs. replenishment and examples.
2. Identify both benefits and consequences of using fossil fuels.
3. Identify which energy source(s) (oil, coal, natural gas, nuclear, geothermal, hydroelectric, biofuels, solar, tidal, and/or wind) is described by each of the statements below:
  - a. Least expensive overall
  - b. Most polluting
  - c. Has NO carbon emissions
  - d. Only useful near coastlines
  - e. Used for heating
  - f. Used for transportation
  - g. Least polluting fossil fuel
  - h. Renewable
  - i. Nonrenewable
  - j. Causes noise pollution

- k. Used to produce electricity
  - l. Waste can be used in weapons
  - m. Causes increase in food prices
  - n. Requires major changes to ecosystem
  - o. Most usable sites are already in use
  - p. Movement of water to spin turbines
  - q. Uses harvested plant materials as a source of fuel
  - r. Produces waste that lasts for thousands of years
  - s. Most expensive per unit of energy obtained
  - t. Cannot produce energy all day/every day
4. Identify 3 alternative energy sources that may be useful in North Carolina, AND explain why you chose each one.
5. Identify 3 impacts on the environment from each of the following:
- 1. Open pit mining
  - 2. Mountaintop removal
  - 3. Mine Shafts
  - 4. Strip Mining
  - e. Oil Drilling
6. Identify which type of mining is most dangerous to people and why.
7. Explain the effects on the environment from each of following:
- 1. Clear-cutting
  - b. Selective cutting (in general—not specific to each type)

**8. Make a table for topic listed below that includes: benefits, consequences, & ways to increase sustainability.**

**a. Urbanization**

**b. Deforestation**

**c. Aquaculture**

**d. Agriculture**

**9. Describe the process of**

**a. Nuclear fission**

**b. Heat island formation**

**c. Aquaponics**

**10. Explain how a growing human population impacts natural resources based on**

**a. Overharvesting**

**b. Loss of habitat**

**c. Pollution**

**11. Describe each of the following AND give an example:**

**a. Conservation**

**b. Mitigation**

**c. Restoration**

d. Preservation

e. Reduce

f. Reuse

g. Recycle

1.

**Unit 9—Natural Resources—Calendar**

<b>Sunday</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>
<b>12/3</b>	<b>5/6</b>	<b>5/7</b>	<b>5/20</b>	<b>5/21</b>	<b>5/22</b>	<b>5/23</b>
			<b>Review Unit 8</b>	<b>Unit 8 TEST</b>  BATS Untamed video & Questions	<b>National Geographic Activity</b>	
<b>Sunday</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>
<b>5/12</b>	<b>5/13</b>	<b>5/14</b>	<b>5/15</b>	<b>5/16</b>	<b>5/17</b>	<b>5/18</b>
<b>Natural Resources  Project: Energy</b>	<b>Energy Resources  Project: Energy Sources</b>	<b>Deforestation  Urbanization</b>	<b>Habitat Loss &amp; Conservation</b>	<b>Agriculture  Aquaculture</b>	<b>Unit 9 Sheet Due  Review</b>	

<b>Sources</b>						
<b>Sunday</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>
<b>5/19</b>	<b>5/20</b>	<b>5/21</b>	<b>5/22</b>			
	<b>Unit 9 TEST</b>  <b>Media Evaluation #10</b>	<b>NC Final Exam Review Packet</b>	<b>Unit 10 Astronomy</b>			

**Essential Standards:**

**2.2.1 Explain the consequences of human activities on the lithosphere.**

**2.2.2 Compare the various methods humans use to acquire traditional energy resources.**

**2.6.4 Attribute changes to Earth's systems to global climate change.**

**2.8.1 Evaluate alternative energy technologies for use in North Carolina.**

**2.8.2 Critique conventional and sustainable agriculture and aquaculture practices.**

**2.8.3 Explain the effects of uncontrolled population growth on Earth's resources.**

**2.8.4 Evaluate the concept of 'Reduce, Reuse, Recycle' in terms of impact on natural resources.**