Read Health Text Book - Chapter 21 Lessons 1 and 2

Chapter 21, Lesson 1 Vocabulary

- **Pollution**  — any dirty or harmful substance in the environment
- **Pesticides**  — products used on crops to control insects and other pests
- **Acid Rain**  — rain that is far more acidic than normal
- **Smog**  — a yellow-brown haze that forms when sunlight reacts with air pollution
- **Ozone Layer**  — a shield that protects living things from ultraviolet (UV) radiation

Greenhouse Effect  — trapping of heat by carbon dioxide and other gases in the air

Global Warming  — a rise in the earth's temperatures

- **Landfills**  — huge pits where wastes are dumped and buried

Hazardous Wastes  — human-made liquid or solid wastes that may endanger human health or the environment

Chapter 21, Lesson 2 Vocabulary

Environmental Protection Agency (EPA)  — the governmental agency that is committed to protecting the environment

- **Biodegradable**  — broken down easily in the environment

Non-renewable Resource  — substances that cannot be replaced once they are used

- **Conservation**  — the saving of resources

Precycling  — reducing waste before it occurs
Taking Care

Like most people, you probably want to help take care of the environment—and you probably think you're doing a pretty good job. Still, you and your family may have habits that are not good for the environment. When you examine your daily behavior and look for possible problems, you will likely be able to identify some positive changes you can make.

A. Take the following environmental action inventory.

1. Read each question and put a check in the first space if you know that the action is good for the environment (even if you don't do it yet). If you know about the importance of the action and it's already a habit, put another check in the second space.

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ACTION INVENTORY</th>
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</thead>
<tbody>
<tr>
<td><strong>In your home, do you:</strong></td>
</tr>
<tr>
<td>1. Recycle everything you can: newspapers, cans, glass bottles and jars, scrap metal, used oil, etc.?</td>
</tr>
<tr>
<td>2. Wash clothes in cold water whenever possible?</td>
</tr>
<tr>
<td>3. Avoid using appliances (such as electric can openers) to do things you can do by hand?</td>
</tr>
<tr>
<td>4. Reuse brown paper bags, bread bags, butter tubs, and so on?</td>
</tr>
<tr>
<td>5. Store food in reusable containers rather than using plastic wrap or aluminum foil?</td>
</tr>
<tr>
<td><strong>In your yard, do you:</strong></td>
</tr>
<tr>
<td>6. Pull weeds instead of using herbicides?</td>
</tr>
<tr>
<td>7. Fertilize with manure and compost, rather than with chemical fertilizers?</td>
</tr>
<tr>
<td>8. Compost your leaves and yard debris, rather than burning them?</td>
</tr>
<tr>
<td>9. Take extra plastic and rubber pots back to the nursery?</td>
</tr>
<tr>
<td><strong>On vacation, do you:</strong></td>
</tr>
<tr>
<td>10. Turn down the heat and turn off the hot water heater before you leave home?</td>
</tr>
<tr>
<td>11. Carry and use reusable cups, dishes, and flatware?</td>
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</table>

P.2
### ENVIRONMENTAL ACTION INVENTORY

<p>| | |</p>
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<thead>
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<tbody>
<tr>
<td>12.</td>
<td>Dispose of trash in trash containers?</td>
</tr>
<tr>
<td>13.</td>
<td>Buy no souvenirs made from wild or endangered animals?</td>
</tr>
<tr>
<td>14.</td>
<td>Stay on roads and trails, being careful not to trample dunes and fragile undergrowth?</td>
</tr>
</tbody>
</table>

**Regarding transportation, do you and your family:**

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<tbody>
<tr>
<td>15.</td>
<td>Keep your car tuned up for maximum fuel efficiency?</td>
</tr>
<tr>
<td>16.</td>
<td>Use public transit whenever possible?</td>
</tr>
<tr>
<td>17.</td>
<td>Walk or ride a bike (rather than driving or being driven) whenever possible?</td>
</tr>
<tr>
<td>18.</td>
<td>Plan to replace your car with a more fuel-efficient model when possible?</td>
</tr>
<tr>
<td>19.</td>
<td>Recycle the engine oil?</td>
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**At work or school, do you:**

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<tbody>
<tr>
<td>20.</td>
<td>Recycle paper whenever possible?</td>
</tr>
<tr>
<td>21.</td>
<td>Use scrap paper for notes?</td>
</tr>
<tr>
<td>22.</td>
<td>Print or copy on both sides of the paper?</td>
</tr>
<tr>
<td>23.</td>
<td>Reuse large envelopes and file folders?</td>
</tr>
<tr>
<td>24.</td>
<td>Use the stairs instead of the elevator whenever you can?</td>
</tr>
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</table>

**When shopping, do you:**

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<tbody>
<tr>
<td>25.</td>
<td>Choose products with as little plastic and foam packaging as possible?</td>
</tr>
<tr>
<td>26.</td>
<td>Buy reusable, rather than disposable, products?</td>
</tr>
<tr>
<td>27.</td>
<td>Buy paper rather than plastic, if you must buy disposable products?</td>
</tr>
<tr>
<td>28.</td>
<td>Buy fresh produce grown locally?</td>
</tr>
<tr>
<td>29.</td>
<td>Buy in bulk to avoid unnecessary packaging?</td>
</tr>
</tbody>
</table>

**In other areas, do you:**

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<tbody>
<tr>
<td>30.</td>
<td>Volunteer your time to conservation projects?</td>
</tr>
<tr>
<td>31.</td>
<td>Encourage your family, friends, and neighbors to save resources, too?</td>
</tr>
<tr>
<td>32.</td>
<td>Write letters to support conservation issues?</td>
</tr>
</tbody>
</table>
1. Click on link below to watch 24 minute video Bill Nye: Pollution Solutions

Users are required to use their LCPS network login name and password to access this resource

http://10.120.3.32/?a=49515&d=00316AA

1. Which statement best explains why pollution stays within the Earth's atmosphere??
   
   c. The Earth is a closed system.

2. Which of the following is an example of non-point source pollution?
   
   c. fumes from a lawnmower

3. What is the importance of sewage treatment plants?
   
   a. To clean water drained from sinks and toilets so that it can be safely released into large bodies of water.

4. If we cut down too many trees, there's an increase of ____ in the air.
   
   d. carbon dioxide

5. Long-term exposure to noises over 85 ____ can lead to hearing loss, headaches and nausea, and stress.

   b. decibels

6. Water or chemical run off that goes down a storm drain ends up in a

   d. streams, rivers, and oceans

7. Most of our air pollution comes from ____.

   c. car exhaust

8. Why do gasoline-powered cars release much more air pollution than electric cars?

   a. Gasoline-powered cars spread exhaust everywhere it goes, unlike electric cars.

9. Plastics made from plant material are ____ which means to rot or decompose; when left outside, it eventually becomes part of the earth.

   c. biodegradable

10. Factories produce chemicals, such as sulfur and nitrogen, that end up in the sky. As they fall from the sky, these chemicals end up causing water pollution. This is known as ____.

   b. acid rain
Quiz Questions For Bill Nye: Garbage

Click on link below to watch 22 minute video Bill Nye – Garbage

*Users are required to use their LCPS network login name and password to access this resource
http://10.120.3.32/?a=49194&d=00288AA

ANSWERS ARE UNDERLINED BELOW

1. The only species that makes waste that cannot be recycled is
   A. gorillas.
   B. plants.
   C. **humans.**
   D. none of the above.

2. Recycling yard waste into compost is
   A. **a closed cycle.**
   B. an open cycle.
   C. an expensive cycle.
   D. a mechanical cycle.

3. Humans make ______ of waste every day.
   A. half a kilogram.
   B. 50 million kilograms.
   C. **2 kilograms.**
   D. None of the above.

4. Toxic chemicals pollute
   A. the land.
   B. the water.
   C. the atmosphere.
   D. **all of the above.**

5. Water pollution
   A. affects plants.
   B. affects animals.
   C. **Both of the above.**
   D. None of the above.
What Does it Mean to Volunteer?

There are many good definitions of volunteerism. But plain and simple, volunteering means doing something “good” for someone, something (such as the environment) or some organization, without expecting anything in return. Sure, kids can help their parents by cutting the grass or washing dishes. Or parents can help their kids by looking over their homework. That's all great! But that's not the same as volunteering. When you think about volunteering, you need to look at the bigger picture. There are all kinds of needs in your community. Volunteering means different things to different people. But nearly every volunteer will agree: Volunteering makes you feel good! You know the feeling you get when you score a point in soccer, or get a good grade, or make a successful presentation at school? Volunteering can give you that same great feeling & that's just the beginning!

Choosing a Volunteer Direction

Before you begin to volunteer, it's important to decide what type of volunteer activity might interest you. Do you want to volunteer as a family or are you a young person who wants to give back? Do you want to start with a volunteer activity that is familiar to you, an activity that presents a bit of a “challenge,” or one that lets you blend your skills and interests with new opportunities? Another option is to “invent” a volunteer project of your own. The possibilities are endless! There is always a need for an extra hand for local school and church activities. Most communities have local volunteer or nonprofit organizations like the American Red Cross or American Cancer Society that would be happy to have you and/or your family's support. Volunteer organizations rely on non-paid workers to raise funds and administer its programs.

A Final Thought

One of the greatest gifts that you can give to another human being is your time and compassion. The type of service that you perform doesn't have to change the world, it should just make a difference in someone else's life. Ultimately, it will make a difference in your life as well!

Think about 3 volunteer opportunities that might interest you or your friends. Use complete sentences to answer each of the questions below.

1. a. What is the volunteer opportunity? _______________________________________________
   _______________________________________________________________________________
   _______________________________________________________________________________

   b. Where would/could you do this? _________________________________________________
   _______________________________________________________________________________

   c. How would this help someone or your community?_____________________________
   _______________________________________________________________________________

   d. How would this help yourself? ___________________________________________________
   _______________________________________________________________________________

   e. How would you get started with this volunteer opportunity (who would you ask, call? Where would you find more info about this?) ____________________
   _______________________________________________________________________________
2.
  a. What is the volunteer opportunity? ____________________________________________
     __________________________________________________________________________
  b. Where would/could you do this? _____________________________________________
     __________________________________________________________________________
  c. How would this help someone or your community? ______________________________
     __________________________________________________________________________
  d. How would this help yourself? _______________________________________________
     __________________________________________________________________________
  e. How would you get started with this volunteer opportunity (who would you ask, call? Where would you find more info about this?) ____________________________
     __________________________________________________________________________

3.
  a. What is the volunteer opportunity? ____________________________________________
     __________________________________________________________________________
  b. Where would/could you do this? _____________________________________________
     __________________________________________________________________________
  c. How would this help someone or your community? ______________________________
     __________________________________________________________________________
  d. How would this help yourself? _______________________________________________
     __________________________________________________________________________
  e. How would you get started with this volunteer opportunity (who would you ask, call? Where would you find more info about this?) ____________________________
     __________________________________________________________________________

List 5 more volunteer opportunities below.
1. _____________________________________________
2. _____________________________________________
3. _____________________________________________
4. _____________________________________________
5. _____________________________________________
SOL 8.3 q  Create environmental design solutions that promote physical and psychological health.

In a small group, create an environmental solution that promotes physical, mental, or emotional health. Describe your idea below.

Names of each member of your group. Each person should fill in their own paper which may be similar or different than the others in your group.

1. What is the problem you want to help?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

2. What is the solution you propose?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

3. How will your solution help the problem?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

4. What part(s) of health is improved by your solution and why/how?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

5. What might be a problem or snag to your solution not working?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________