

Name \_\_\_\_\_

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

### Pollution Centers

Go to each website and follow the instructions given. Record your groups answers in the blanks for each question. Using the IMacs go to the website given and answer the questions as a group. Each member may want to choose different questions to answer in order to get them all answered. We will spend 7-8 minutes at each station.

1. **Green Cleaning** <http://www.howdini.com/howdini-video-6691716.html>

1. List 2 cleaning products that can be found in your home. \_\_\_\_\_

2. What does the term "Green Cleaning" mean?  
\_\_\_\_\_

3. What are the 8 basic "green Cleaning" products? \_\_\_\_\_  
\_\_\_\_\_

4. How can you make Green Glass cleaner at home?  
\_\_\_\_\_

5. What benefits do using Green Cleaners have to lower pollution?  
\_\_\_\_\_

2. **Bathing in Bleach**

<http://tlc.discovery.com/videos/my-strange-addiction-bathing-in-bleach.html>

1. Why does the lady bathe in and drink bleach? \_\_\_\_\_

2. What negative impact has bleach had on her clothing and furniture?  
\_\_\_\_\_

3. Where does bleach fall on the PH scale? (use your notes) \_\_\_\_\_

4. What does bleach do to her eyes and skin? \_\_\_\_\_

5. Why is bleach not safe for the human body? \_\_\_\_\_

6. Given your knowledge of bleaches PH level, what would you recommend for her to do and what would you tell her to convince her? \_\_\_\_\_  
\_\_\_\_\_

### 3. Noise Pollution

<http://www.epa.gov/air/noise.html>

1. By definition what is noise pollution? \_\_\_\_\_
2. What are some medical conditions caused by noise \_\_\_\_\_  
& \_\_\_\_\_.
3. What are 2 ways a person can protect themselves from noise pollution?  
\_\_\_\_\_
4. Initially the EPA created the (ONAC) which stands for \_\_\_\_\_ to  
control noise under the clean air act in which year? \_\_\_\_\_ (use notes )
5. What are 2 sources of noise regulated by the EPA? \_\_\_\_\_

### 4. Biodegradable

<http://www.greenecoservices.com/how-long-does-it-take-for-trash-to-biodegrade/>

1. According to this website how long does it take for a plastic bottle to biodegrade? \_\_\_\_\_
2. Is tin foil Biodegradable? \_\_\_\_\_ What about a tin can? \_\_\_\_\_
3. Will a glass bottle degrade faster than a plastic one, \_\_\_\_\_ if so how long does it take?
4. In 2003 \_\_\_\_\_ billion paper cups were thrown away in the United States?
5. According to this website, do landfills and scrap-yards really help the environment?  
Explain your answer: \_\_\_\_\_

### 5. Recycling Louisiana [http://livingstonwaste.com/recycling\\_facts](http://livingstonwaste.com/recycling_facts)

1. How many trees does the average American use each year? \_\_\_\_\_
2. Recycling paper creates \_\_\_\_\_% less air pollution than creating paper from scratch.
3. 5 recycled PET bottles make enough fiberfill to stuff a \_\_\_\_\_?
4. The 36 billion aluminum cans landfilled last year had a scrap value of more than  
\_\_\_\_\_ million.
5. Recycling 1 ton of paper saves \_\_\_\_\_ mature trees, \_\_\_\_\_,000 gallons of water, 3 cubic  
yards of landfill space, 2 \_\_\_\_\_ of oil, and 4,100 kilowatt-hours of electricity –  
enough energy to power the average American home for \_\_\_\_\_ months.

## Guess the Unknown Substance

PH levels Discovering levels of given substances. Use 1 strip per substance, DO NOT TASTE or TOUCH any of the substances. Record your results.

Choices are: vinegar, lemon juice, milk, baby wash, mean green, gain, orange juice

1. What number range does #1 fall into? \_\_\_\_ This number makes it a very strong acid or base? What do you think it is? \_\_\_\_\_
2. What is the PH of #2? \_\_\_\_ This makes it a acid or base? What is it \_\_\_\_\_
3. Which category does #3 fall into? acid or base, what is its PH? \_\_\_\_ and what is it \_\_\_\_\_
4. What is the PH of the #4 substance? \_\_\_\_ Is it an acid or base? What do you think the substance is? \_\_\_\_\_
5. What is the PH of #5 \_\_\_\_ does this make it an acid or base? What is this substance? \_\_\_\_\_
6. PH of #6 \_\_\_\_ . Acid or Base and what is it? \_\_\_\_\_
7. What number range does #7 fall into? \_\_\_\_\_ this range make it a very strong acid or base? What do you think it is? \_\_\_\_\_

Review:

What effects do acid rain have on aquatic ecosystems, and human populations?

What are ZEV's?

Give an example of each of the following types of pollution: air, water, sound, light

Explain how sick building syndrome can be prevented?

How does asbestos cause lung disease?

Know vocabulary words from chapter 12.

How can acid rain be prevented and its effects lessened?

Objectives: Discover Ph of common substances.

Use stations and ipods to research and gather information regarding pollution in the world around us.

Review topics in chapter 12.

