

Drops to Oceans

Station 11 (cont.)

Activity 2

Where Does It Go?

When it rains, where does the water go? Look around your school or home for creeks, storm drains, rivers, and lakes.

- *Count all the water outlets you find.*
- *Make a chart.*
- *Draw a diagram that shows where the rain from the roof of your school or home goes.*

This is a good rainy day activity. As the rain stops, you can follow the remaining runoffs. Suggest headings for the chart such as creeks, rivers, or lakes. Under each heading, list creeks, rivers, or lakes as the students name them. Count how many water outlets you have. You can identify storm drains by their street addresses.

There are many sections on this site about ground water.

Access the sites for this activity through your CD-ROM:

Click on Station 11, Activity 2

For the one-computer classroom: Give your students time to explore this site on their own. You could assign this as homework if many students have Internet access in their homes or at the library.

Activity 3

Rain Hats

Some places have “acid rain.” Will this burn a hole in your umbrella? Learn about acid rain and record your answers on the activity page Acid Rain.

You can print out the Web pages on acid rain and pH, and depending on your students, let them fill out the activity page on their own or fill it out together.

An answer key for *Acid Rain* (page 59) is provided on page 79.

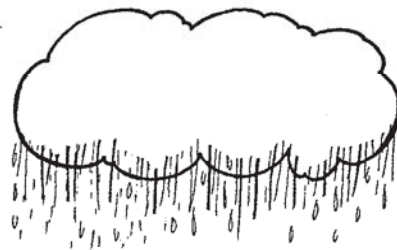
Access the sites for this activity through your CD-ROM:

Click on Station 11, Activity 3

Name _____

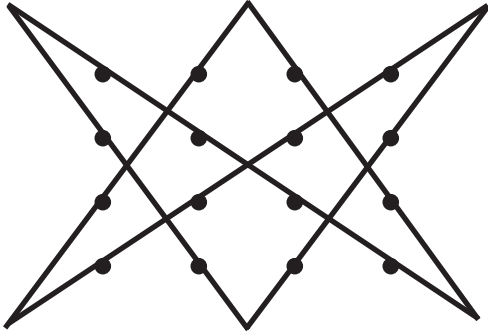
Acid Rain

Station 11, Activity 3



1. Acid rain is a mixture of rainfall and _____.
2. What is the pH of pure water? _____
3. How low can the pH of acid rain be? _____
4. What are two human activities that may cause acid rain? _____
5. Why can there be acid rain in forests? _____
6. What are at least 2 harmful effects of acid rain? _____
7. The pH of an acid is: _____
8. Give 2 examples of liquids that are acidic. _____
9. Give 2 examples of liquids that are basic. _____
10. At what pH do adult fish die? _____
11. Do you need a rain hat to protect against acid? _____

5. The lines should look like this:



Station 10

Page 55

1. $1957-1867=90$
2. $1874-1867=7$
3. $1886-1867=19$
4. $200X-1886=xxx$
5. $160/4= 40$
6. Examples: 15 year old teachers, ability to file a claim on land, grasshopper invasion (today we have methods to control this kind of thing.)
7. Examples: parents eager to provide good education for children, adding onto or remodeling a home, family life very important, blizzards and other natural disasters, college was expensive.

Station 11

Page 59

1. elements in the air, or gases
2. 7.0
3. It can fall as low as 4.0
4. Burning fossil fuels, coal and oil, or exhaust from cars may cause acid rain.
5. The gases that cause acid rain can be carried hundreds of miles by winds.
6. It can destroy foliage, eat away stone on buildings, harm the environment, and prevent animals from reproducing.
7. below 7.0
8. lemon juice, vinegar, battery acid
9. milk of magnesia, ammonia, lye
10. 4.0 or below
11. Answers will vary.

Station 13

Page 69

1. straight and fast
2. 186,000 miles per second
3. 8 minutes
4. Accept their estimates. If they have never flown, help with this estimate.
5. Block it with an object; send it through water; put a mirror in its path. A lens is also an acceptable answer.
6. wider in the middle
7. narrower in the middle
8. red, yellow, green, blue, violet
9. rainbows, or with prisms
10. It is only one color of light.

Station 14

Page 73

1. up to 10,800
2. 500,000 pounds — talk with the students about this product...can they think of some other things that might weigh 250 tons?!
3. about 300 kinds of bats do not eat insects.
4. 8 species of bats are in Maine.
5. Answers will vary.
- 6a. panda
- 6b. caribou
- 6c. kangaroo
- 6d. armadillo
- 6e. shrew
- 6f. tortoise
- 6g. lemur
- 6h. alligator
- 6i. gorilla
- 6j. cheetah