

THE COUNTRY CLUB CREEK ICHTHYCID



Name: _____ Date: _____ Period: _____

Part 1



You are taking on the role of Environmental Investigator for the Country Club Creek Ichthyicide. Your job requires that you have knowledge about watersheds, particularly the watersheds in your investigation area.

Define watershed: _____

Part 2



Use information from the story and clues from the map and your notes to decide which sites you will test. Make your calculations below. You may choose to test soil, water, or drill a well to test groundwater (test at least ONE of each), but remember you have \$1500 to spend on the project, so choose wisely.

Site	Sample type	COST (\$)
1	well	300
2	soil	200
3	soil	200
4	soil	200
5	soil	200
6	well	300
7	soil	200
8	soil	200
9	well	300
10	well	300
11	well	300
12	water	100
13	water	100
14	water	100
15	water	100
16	soil	200
17	well	300

Site	Sample type	COST (\$)
19	water	100
20	well	300
21	well	200
22	well	300
23	well	300
24	well	300
25	well	300
26	soil	200
27	soil	200
28	soil	200
29	soil	200
30	well	300
31	soil	200
32	well	300
33	water	100
34	water	100
35	water	100

Calculations:

EXAMPLE –Sites 2,3,4 (soil) 12,13,14 (water) 1,6 (well)= 3 (\$200) + 3 (\$100) + 2 (\$300)= \$1500

Sites chosen: _____

Cost: _____

Total: \$1500

Part 3



Take only one site bottle at a time. To test a site, mix **4 drops of your sample** (could be surface water, soil or groundwater) with **2 drops of pesticide indicator**. Record the site number from the Country Club Creek map, the color, and the concentration range and code from the chart in the results table.

Concentration ranges for site samples

Color	Pesticide Concentration Range (ppb)	Code
Red	not detected less than 0.1	0
Orange	0.11 - 0.8	1
Yellow to green	0.81- 4.0	2
blue-green	4.1 – 32.0	3
Blue-purple	more than 32	4 (SOURCE)

III. Results Table

Site Number	Color	Pesticide Concentration Range	Code

IV. Conclusions

1. Which site caused the fish kill? _____

2. How did the pesticides end up in the pond?

3. Who in the community might be concerned about high levels (Code 2-4) of pesticides? Why?

4. Why is it necessary to clean up the pesticides?

5. How did health officials plan to handle the clean up of the pesticides (read the newspaper article)?
