

Student Sheet 2.2 Fish Kill Lab Report



Name: _____ Date: _____ Period: _____

I. Hypothesis

1. What substance do you think killed the fish? Why?

II. Methods and Materials

You will conduct 7 water quality tests (ammonia, nitrate, etc) of the pond sample to determine which chemical caused the fish kill.

Squeeze **2 drops** of the Pond Sample into one of the cups in a Chemplate. Add **2 drops** of one of the tests (ex. Ammonia) to the cup. Add **2 drops** of indicator. **Fill in the results table.**

Color	Contaminant Concentration Range	Contaminant Effect Level
Red	< 0.1 ppb	None
Orange	0.11 - 0.8 ppb	None
Yellow-green	0.81- 4.0 ppb	Low
Green-blue	4.1 – 32.0 ppb	Medium
Blue-purple	> 32 ppb	Lethal

III. Results

Sample Site: *Mabel Davis Park Pond*

TEST	Concentration Range	Effect Level
Ammonia		
Nitrate		
Metals		
Dioxins		
Pesticide		
Chlorine		
PAHs		

Lab Report Conclusions

IV. Conclusions

2. What caused the fish kill? _____

3. Did your results prove or disprove your hypothesis (question #1) _____

4. Non-point pollution comes from everyday citizen misuse or overuse of chemicals and or littering that runs off the watershed into our creeks, whereas point source comes from an identifiable source. Circle the answer that is **point source** pollution.

- (a) motor oil
- (b) fertilizers and pesticides
- (c) tanker truck spill
- (d) soapy water

5. Do you think the cause of the fish kill was point source or non-point source pollution? Why?

6. What are pesticides and how do they impact aquatic life? (see student sheet 2.1)

7. Write or draw what needs to happen next to continue with this fish kill investigation.
