# Pond Abiotic & Biotic Field Results

Your Name: _____ Team Name: _____ Date: _____
Estimated Perimeter: _____ Estimated Surface Area: _____

1. Make a sketch of the pond being analyzed. Include vegetation; bushes, grasses, trees, etc.

2. General Appearance: Describe the color and smell of the pond. Note any garbage, animal signs, or other observations.

## *Abiotic Results-*

3. Temperature: Air _____ $^0$F/$^0$C Surface _____ $^0$F/$^0$C Bottom _____ $^0$F/$^0$C

4. Turbidity: Describe the clarity of the water. How clear is it? Can you see the bottom? Can you guess an approximate depth?

5. Chemical Properties: a. Dissolved Oxygen _____ ppm b. pH _____

## *Biotic Results-*

6. What life do you see in the pond?

7. What signs of life do you see around the pond?

8. Does it appear that the pond is actively used by a great diversity of organisms?

9. How are these organisms using the pond?

10. How does the pond play a role in the ecosystem you are observing?

## *The Pond Prognosis-*

1. Research and decide whether each test listed showed good or poor results. Place an "X" in the appropriate box. In the last row, total the number of "X"s from each column.

| Water Tests | Good | Poor (Danger reading) | Uncertain/ Not applicable |
|---|---|---|---|
| General appearance | | | |
| Temperature | | | |
| Turbidity | | | |
| Dissolved Oxygen | | | |
| pH | | | |
| Invertebrate Diversity | | | |
| **Total** | | | |

2. List three conclusions about the current state of the pond's health (ex. Dissolved oxygen level is good for trout growth, pH level is 7.5- good for invertebrate diversity is low, etc.)
   A.

   B.

   C.

3. Rate the health of the pond on a scale from 1 to 10 (circle your answer). Be sure to explain why in writing your choice.

   1 2 3 4 5 6 7 8 9 10
   Very Sick Very Healthy

4. List one positive way and one negative way in which humans may be affecting the pond.

Positive:

Negative:

5. What do you suggest for the current or better health for the pond?