

Station 1-Answer all questions on your papers

## Temperature

1. What are ideal temperatures for life in water?
2. Take a reading for each beaker

Beaker 1\_\_\_\_\_

Beaker 2\_\_\_\_\_

Beaker 3\_\_\_\_\_

3. Which beaker is the **best** choice for fish?

Why?

4. What are two reasons that can cause temperature change for water?
5. What are some results to fish in a temperature change?

Station 2- Answer all questions on your papers

## Nitrates

1. What are nitrates?
2. What is the Nitrate level for drinking water?
3. What are the best nitrate levels for fish in water?
4. Nitrate levels and descriptions of beakers

Beaker 1\_\_\_\_\_ Beaker 2\_\_\_\_\_ Beaker 3\_\_\_\_\_

5. Which beaker is the best (ideal) environment for fish to live in?

Why?

6. What are some causes of nitrates to build up?
7. What are the results of the presence of nitrates in fish?

Station 3-Answer all questions on your papers

## Bio-Indicators

1. What are Bio-indicators?

2. How do you know a water source is healthy by looking at bio-indicators?
3. How do you know a water source is a poor one by looking at bio-indicators?
4. By looking at the beakers, which beaker is the healthiest?
5. Why is this beaker the healthiest?
6. What causes the changes of bio-indicators?
7. What are the results of only few bio-indicators present?

Station 4-Answer all questions on your papers

### *Turbidity*

1. What is Turbidity?
2. What is the ideal level of Turbidity?

3. Write down the level of Turbidity's of the beakers and describe them

Beaker 1: Turbidity level\_\_\_\_\_ Description\_\_\_\_\_

Beaker 2: Turbidity level\_\_\_\_\_ Description\_\_\_\_\_

Beaker 3: Turbidity level\_\_\_\_\_ Description\_\_\_\_\_

4. Which one is the most turbid and why?

5. Which one is the least turbid and why?

6. Which beaker would be the healthiest and why?

7. What are some causes of increased turbidity?

8. What are the results of high turbidity?

Station 5-Answer all questions on your papers

***pH***

1. What is pH?

2. Acids=

Bases=

Neutral=

3. What is the ideal pH of Freshwater=  
Saltwater=

4. Take the pH of the beakers using the strips on your desk.

Beaker 1\_\_\_\_\_

Beaker 2\_\_\_\_\_

Beaker 3\_\_\_\_\_

5. Which beaker is ideal for fish to live in?

Why?

6. What are some causes of pH changes?

7. What are some results of changes in pH?

Station 6-Answer all questions on your papers

## Dissolved Oxygen

1. What is dissolved oxygen?

2. What is the ideal level to support a diverse population of fish?

3. What are the temperatures and levels of dissolved oxygen in your beakers

Beaker 1=Temp\_\_\_\_\_

DO Level\_\_\_\_\_

Description\_\_\_\_\_

Beaker 2=Temp\_\_\_\_\_

DO Level\_\_\_\_\_

Description\_\_\_\_\_

Beaker 3=Temp\_\_\_\_\_ DO Level\_\_\_\_\_ Description\_\_\_\_\_

4. Which beaker has the ideal level of Dissolved Oxygen?
5. How does temperature affect the levels of dissolved oxygen based on your readings?
6. What causes changes in Dissolved Oxygen levels?
7. What are some results of changes in Dissolved Oxygen Levels?