**Name:

Date:

Body of Water Name:**

**What Does My Data Mean?**You can categorize water quality (health) as Great, Good, Fair, or Poor.
Use this key to categorize each of your measurements.
Give each parameter a score, and then assess water quality overall to make a claim!

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Quality Parameters** | **Great** | **Good** | **Fair** | **Poor** |
| Temperature | 4-10° C | 0-3° C, 10-15° C | 16-20° C | >20° C |
| Dissolved Oxygen | 7 or 8 ppm | 5 or 6 ppm | 4 ppm | 3-0 ppm |
| Nitrate | None | 1-4 ppm | 5 ppm | 20+ ppm |
| Phosphate | 0-1 ppm | 2 ppm | 4 ppm | 5+ ppm |
| Turbidity | <15 JTU | 15-40 JTU | 41-100 JTU | 100+ JTU |
| pH | 7 | 6 or 8 | 8.5 | 4, 5, 9+ |
| Fecal coliform bacteria |  | negative |  | positive |

**Claim / Scientific Conclusion on Overall Water Quality (Health):**

 **Evidence:**

**Wonders/questions/ideas for further investigation:**

**Water Quality Comparison – 3 Data Sets**Write your measurements in the chart below. Don’t forget units (e.g. °F or ppm)!
Compare your measurements to one or two other groups.
Write the other groups’ data in the chart below.
Strong science needs multiple data sets to prove a trend and then make a conclusion!

|  |  |  |  |
| --- | --- | --- | --- |
| **Quality Parameters** | **My/Our group:** | **Comparison group 1:** | **Comparison group 2:** |
| Temperature |  |  |  |
| Dissolved Oxygen |  |  |  |
| Nitrate |  |  |  |
| Phosphate |  |  |  |
| Turbidity |  |  |  |
| pH |  |  |  |
| Fecal coliform bacteria |  |  |  |

**Circle One:** My group’s results were (exactly the same as / similar to / quite different from) Comparison group 1’s results.

 **Circle One:** My group’s results were (exactly the same as / similar to / quite different from) Comparison group 2’s results.

 **Put an X next to the one that is true:**\_\_\_\_\_ I feel confident in my claim, because other scientists got the same or very similar results.

\_\_\_\_\_ Our measurements are quite different from other scientists’ results, so we need more experimentation to prove a claim.