**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Lab Partner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pond Water Identification—Or What Does it Mean to be Alive?**

**Statement of Inquiry:**

Living things perform processes that transform the world around them in order to generate energy needed for life.

**Factual Question:**

What do the organisms look like? (Observations)

**Conceptual Question:**

How is the classification of living things structured?

**Debatable Question:**

Should we as humans have the power to control other living things?

**Purpose:**

* To become acquainted with a loupe and a microscope
* To find, sketch and identify pond organisms

**Materials:**

* Loupe
* Microscope
* Pond water
* Slides
* Coverslips
* Pasteur pipet

**Method:**

* Put a very small drop of pond water on a slide
* Place a coverslip over it at a 45 o angle
* Look through a loupe
* Look through a microscope at 4x and 40 x
* Once you see a living thing follow it and sketch what you see in your logbook

**Pond Life Identification Kit** <http://www.microscopy-uk.org.uk/index.html?http://www.microscopy-uk.org.uk/pond/index.html>

**A Virtual Pond Dip** <http://www.microscopy-uk.org.uk/index.html?http://www.microscopy-uk.org.uk/pond/index.html>

**Observations:** In Logbook

**Conclusion:**

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**Questions:**

1. What are some of the ways to know if something is alive?

2. Do all the organisms swim in the same way? Describe any differences.

3. List the names of 4 of the organisms you saw and what they are classified as.

|  |  |
| --- | --- |
| **Name of Organism** | **Linnaeus Classification** |
|  |  |
|  |  |
|  |  |
|  |  |

4. Did you see something in the field of view that was not moving?? What could this be??

5. How do these organisms contribute to an ecosystem? Define ecosystem first.