Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Block\_\_\_\_\_\_

**Microscope Lab #2: Pond Water and Prepared Slides**

**Part I: Review the parts of a microscope and write the parts and functions in your notebook.**

1. **Label the diagram and complete the table below.**

|  |
| --- |
|  |
| |  |  | | --- | --- | | **PART** | **FUNCTION** | | Fine Adjustment Knob |  | | High Power Objective |  | | Coarse Adjustment Knob |  | | Ocular (eye) Lens |  | | Low Power Objective |  | | Stage |  | | Diaphragm |  | |

**Part II: Finding Specimens**

**Materials:** Compound microscope, slides, covers lip, pond water

**Procedures Pond Water:**

1. Properly carry your microscope to your lab table
2. Using a dropper place 2-3 drops of pond water on a slide.
3. Place a cover slip on an angle to avoid air bubbles
4. Place the slide on the stage (under the stage clips).
5. Observe the slide #1 under scanning (lowest) power and make a drawing under question #1.
6. Observe under low power and make a drawing under question #1.
7. Observe under high power and make a drawing under question #1.

**Questions:**

1. Draw a picture of organisms in your pond water as you see it under each of the following magnifications

|  |  |  |
| --- | --- | --- |
| Diagram of Scanning Power | Diagram of Low Power | Diagram of High Power |

2. What characteristics of life did you observe while looking at your pond water?

**Procedures Prepared Slides:**

1. Properly carry your microscope to your lab table
2. Place the slide on the stage (under the stage clips).
3. Observe the prepared slide #1 under scanning (lowest) power and make a drawing under question #1.
4. Observe under low power and make a drawing under question #1.
5. Observe under high power and make a drawing under question #1.
6. Repeat procedure for a second slide

**Questions for Prepared Slides:**

1. Draw a picture of slide #1 as you see it under each of the following magnification

|  |  |  |
| --- | --- | --- |
| Diagram of Scanning Power | Diagram of Low Power | Diagram of High Power |

2. Draw a picture of slide #1 as you see it under each of the following magnification

|  |  |  |
| --- | --- | --- |
| Diagram of Scanning Power | Diagram of Low Power | Diagram of High Power |

3. What was the most interesting thing about any sample you looked at under the microscope? What surprised you the most today?

4. What part did you have the most difficulty with when using the microscope? Why was this so difficult and how could it be corrected?