**Formative Assessment**  Name: **Answer Key**  
BIOLOGY: Using Microscopes Time: 10 minutes

A close-up of a bug

Description automatically generated

**100x**

A biologist is researching mosquito larvae and needs to observe them using a light microscope.

**Q1. *Use*** the image shown (above) to ***create*** a biological drawing of the mosquito larvae. **(4 marks)**

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| --- | --- |
| **Marking Guide** | **Marks** |
| Neat, clean lines created using a sharp pencil. | **1** |
| Simple line drawing (no shading, smudging, or feathering) | **1** |
| Labels are included with neat ruled lines. | **1** |
| Title and magnification are included with the illustration. | **1** |

**Q2. *Explain*** how the biologist would use a microscope to observe mosquito larvae. **(6 marks)**

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| **Marking Guide** | **Marks** |
| There is a clear and detailed description of the steps, including the correct names for each part of the microscope. | **5-6** |
| Most of the steps are described. Some parts of the microscope may not be named. | **3-4** |
| There are simple statements that give some steps of the method. | **1-2** |
| No relevant content. | **0** |

**Example response:**

1. Prepare wet mount by placing mosquito larvae in water on a microscope **slide.**
2. Gently cover with a **cover slip** to flatten larvae.
3. Set up the microscope and secure the slide on the microscope **stage.**
4. Use the **coarse focus knob** (low magnification) to locate larvae.
5. Turn the **nosepiece** to switch to higher magnification.
6. Enhance visibility and focus by adjusting the lighting and turning the **fine focus knob** (high magnification).
7. Observe the larvae and record observations.

**PERSONAL LEARNING REFLECTION**

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| --- | --- |
| One thing I have learnt from doing this activity is… | **SCORE:**  \_\_\_\_\_\_ / 10  \_\_\_\_\_\_\_ % |