

TP 3: Studying Insects

1- Objective

To understand the classification and identification of insects through hands-on examination and observation.

2- Materials Needed

- Binocular loupe or light microscope
- Glass slides
- Coverslips
- Dissecting needles
- Petri dishes
- Insect collection containers (glass or plastic)
- Writing tools and notebooks
- Books or guides for insect identification

3- Procedure

✓ Collection and Presentation of Insect Samples

- Students present the insects they have collected.
- Demonstrate safe handling and proper techniques for transferring insects to the lab containers.

✓ Sample Preparation

- Place the insect on a glass slide.
- If needed, use dissecting needles to separate body parts for better observation.
- Cover with a coverslip if necessary.

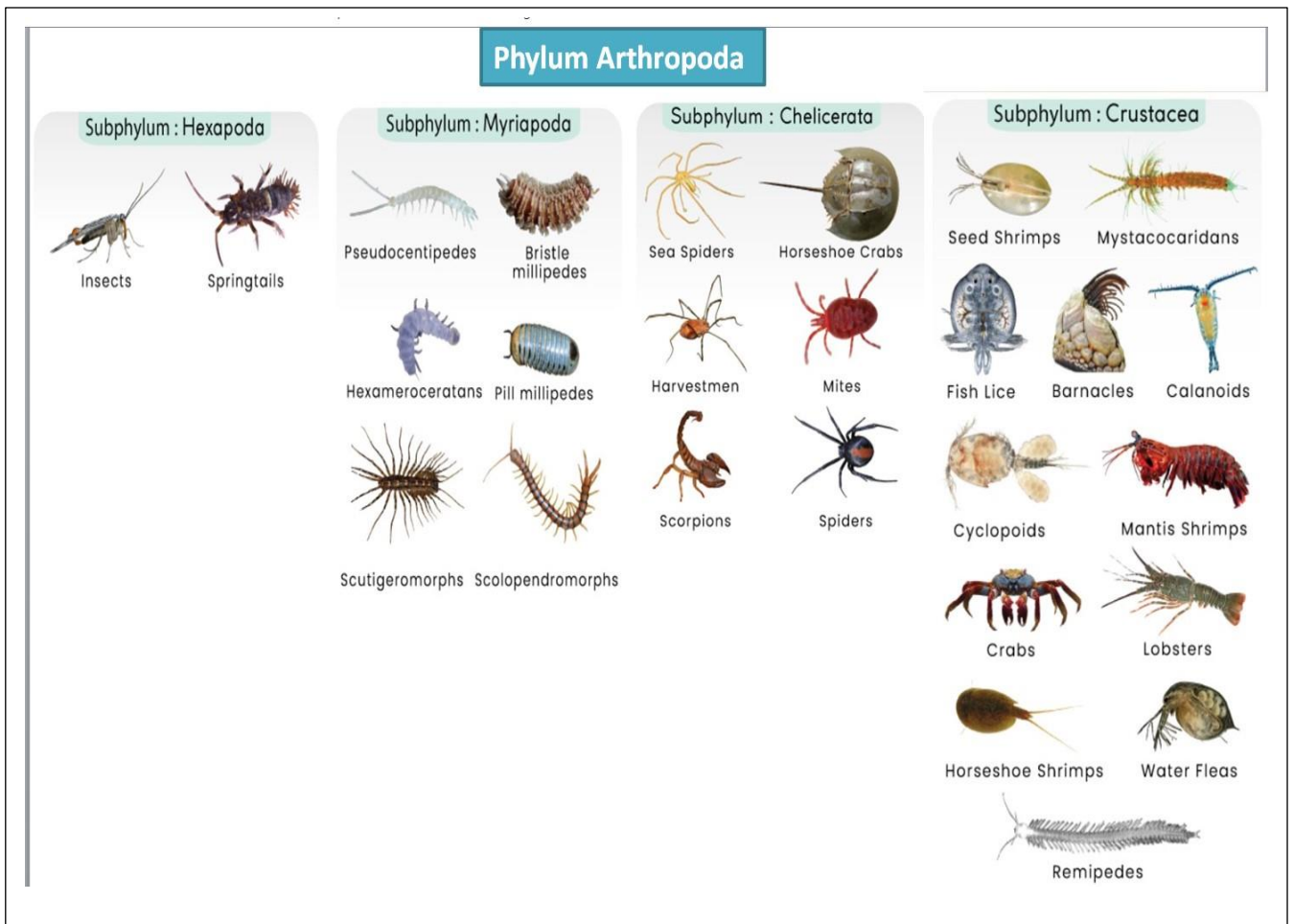
✓ Microscopic Examination

- Instruct students on how to use the microscope to observe the insect details.
- Focus on observing key characteristics such as wings, legs, antennae, mouthparts, and body segmentation.

✓ Identification and Classification






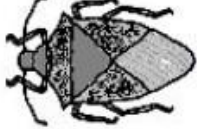


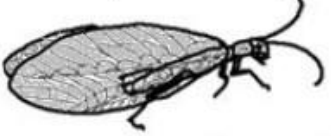


- Use identification guides and books to help students identify the insect species.
- Students record the physical and environmental characteristics of each species.

- Assist students in classifying insects into orders and families based on observed characteristics.
- ✓ **Drawing Detailed Diagrams**
 - Students draw detailed diagrams of the insects they examined.
 - Highlight key parts like wings, legs, antennae, and any distinctive features.
 - Encourage accuracy and clarity in their drawings.
- ✓ **Discussion and Conclusions**
 - Facilitate a group discussion on the findings.
 - Compare observations and discuss the diversity of insect samples collected.
 - Draw conclusions about the importance and role of insects in their environments.



Position of Insectes in Arthropoda Phylum

Orders of Insects

Ephemeroptera-Mayflies 	Odonata-Dragonflies and Damselflies 	Orthoptera-Grasshoppers, Crickets, Roaches, and Mantids 
Isoptera-Termites 	Dermaptera-Earwigs 	Hemiptera-True Bugs 
Homoptera-Cicadas and Hoppers 	Coleoptera-Beetles 	Neuroptera-Lacewings 
Lepidoptera-Butterflies and Moths 	Diptera-Flies and Mosquitoes 	Hymenoptera-Ants, Wasps and Bees 