

Lab: Squid – Class Cephalopoda

Purpose:

To examine the internal and external structure of a squid.

Use your textbook as a reference (**Nelson** p. 332 / Miller & Levine p 592)

Procedure / Observations:

1. Examine the external features of the squid. Place the squid in the dissection tray ventral side up. (Locate the siphon = ventral side). **Draw** the squid and **label** the following parts:
 - Arm
 - Mantle
 - Eye
 - Fin
 - Tentacle
 - Siphon
 - Head
 - Suckers
2. Examine the internal features of the squid. Cut the mantle. Make the cut near the siphon to the posterior end (tip of the mantle). **Draw** and **label** the following parts:
 - Siphon
 - Gill
 - Ink sac – if it is still intact, you can pop it
 - Jaws and beak
 - Find at least 3 parts of the visceral mass. What is the visceral mass?
 - Locate and remove the pen. What is the pen?
3. Next,
 - a. Remove the beak. Is the beak sharp or dull?
 - b. Remove the eyeball. What does it feel like in the centre? Remove the lens of the eye. What does it look like?
 - c. What is the radula? Explain the **function** of the radula. Can you locate it?
 - d. What is the **function** of the siphon?
4. How can cephalopods defend themselves – there is more than one way?
5. Which cephalopod has the most tentacles? Do the tentacles have suckers on them? (This cephalopod is an example of a living fossil – unchanged for millions of years).
6. Which cephalopod has the most developed brain?
7. Define the term dioecious.
8. Explain how the internal & external features of the squid help it in its environment.
→ Give at least 2 examples for each.
9. Compare and contrast the structure of the squid to that of the clam.
→ Give at least **5 similarities** and **3 differences**.