

Name _____ Squid Dissection

A) External Anatomy:

Find each of the parts. Check each item to indicate that you found it.

1. Locate the water jet. The water jet is found on the ventral side of the squid.
2. The tentacles (long) and arms (short) are attached to the head of the squid.
3. Find the two large eyes on the side of the head.
4. Locate the body, which is covered by the mantle, and locate the two fins.
5. Each arm has sucker disks, count the number of sucker discs on one arm: _____

B) Finding the Jaw

Open up the arms and remove any that are in your way. Deep in the middle of the arms are the mouth and a beak-like jaw. Use forceps to remove the jaw (beak).

C) Analysis

1. How many arms does the squid have? _____ How many tentacles? _____
2. What is the function of the arms and tentacles? _____
3. What is the function of the water jet? _____
4. To what kingdom does a squid belong? _____
What phylum? _____ What class? _____
5. Name one other organisms in the same CLASS _____ .

D) Internal Anatomy

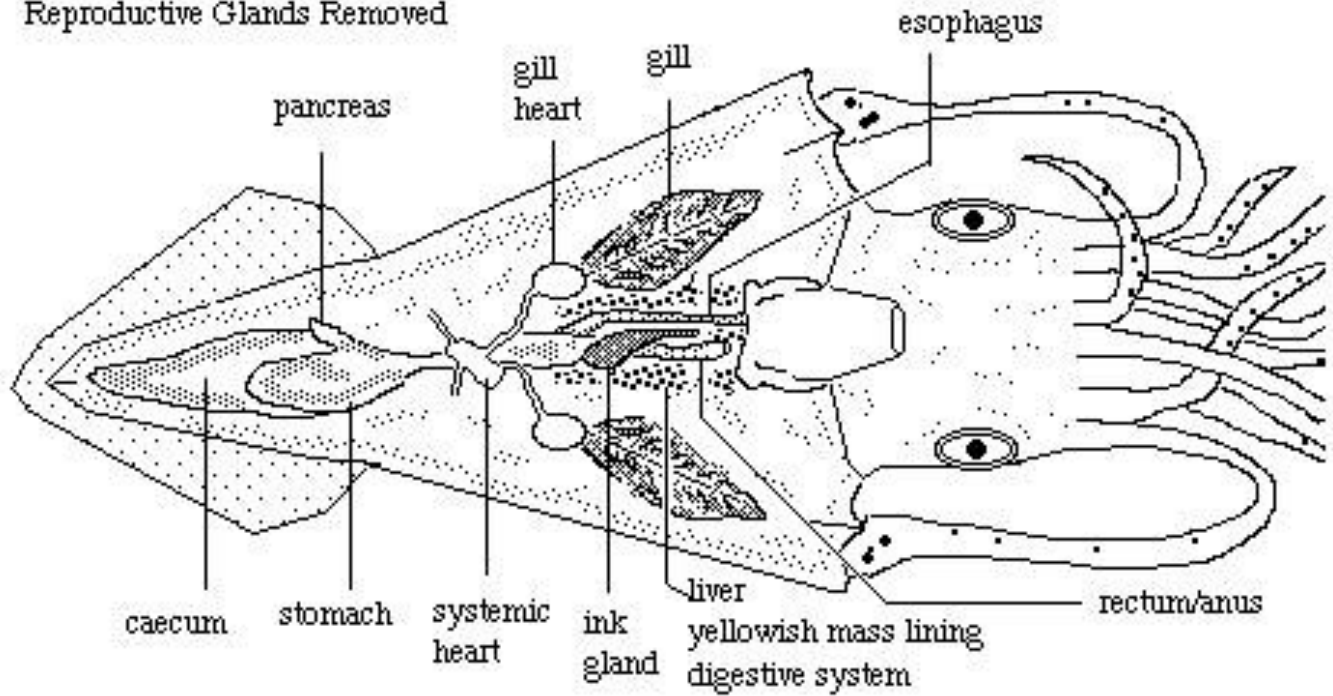
Procedure: Turn the squid ventral side up. Pull the mantle up with the scissors where the water jet is, it should be loose and easy to pull up. Use scissors to cut from the water jet to the fins. Open the mantle to expose the structures inside.

1. Find the ink sac, this is a small dark sac near the water jet. Remove the ink sac and use your dissecting needle to break the pouch. Write your initials on this paper in squid ink or just smudge the paper.
2. Find the esophagus, this is best found by looking into the mouth and seeing where it leads. The muscular mass that surrounded the beak can be pulled up (and out) to show the tube that is the esophagus.
3. To find the stomach, follow the esophagus toward the posterior.
4. The anus empties into the water jet, use scissors to cut the water jet down the center so you can see the small opening of the anus.
5. Locate the gills, these are feathery structures that may be hidden under other things, there are two of them.
6. Follow the gills toward the interior to find an enlarged structure at their base: this is the gill heart.
7. All the way toward the fin is a whitish or yellowish structure: this is the gonad. The male gonad is generally white, the female gonad is usually more yellow to clear. Is your squid male or female? _____
8. The hard shell-like structure that lies along the backside of the squid is the pen. See if you can remove the pen in one piece. The pen serves to stabilize the squid while it swims (like our backbone).

E) Observations and Analysis

1. How many gills does the squid have? _____
2. Where does the ink sac empty into? _____
What is its function? _____
3. What is the function of the pen? _____
4. Where do wastes exit the squid? (be specific) _____

Reproductive Glands Removed



F) Label the structures on the diagram above with the following words:

Stomach
Ink sac
Esophagus
Gill
Gill Heart
Systemic Heart
Anus
Pen
Eye
Arm
Tentacle
Stomach
Cecum
Funnel