

Shark Dissection Guide



The above picture was taken in the summer of 2000. I was fishing on a charter boat near Key West, Florida.

Identify the following structures and \checkmark to indicate that you found the structure.

External Structures

- nostrils
- rostrum
- spiracles
- pharynx
- clasper; males only
- lateral line
- cloacal opening
- placoid scales

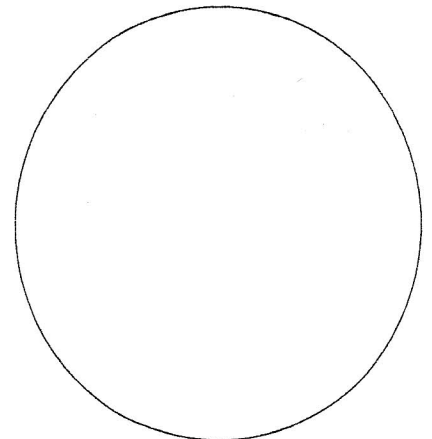
What is the sex of your shark? What structures helped you identify the sex of the shark?

Internal Structures

- | | |
|---|---|
| <input type="checkbox"/> parietal peritoneum | <input type="checkbox"/> visceral peritoneum |
| <input type="checkbox"/> liver | <input type="checkbox"/> bile duct |
| <input type="checkbox"/> rectal gland | <input type="checkbox"/> gallbladder |
| <input type="checkbox"/> esophagus | <input type="checkbox"/> stomach |
| <input type="checkbox"/> rugae | <input type="checkbox"/> duodenum |
| <input type="checkbox"/> pyloric valve | <input type="checkbox"/> pancreas |
| <input type="checkbox"/> spleen | <input type="checkbox"/> valvular intestine (ileum) |
| <input type="checkbox"/> spiral "valve" | <input type="checkbox"/> rectum |
| <input type="checkbox"/> testes | <input type="checkbox"/> transverse septum |
| <input type="checkbox"/> ovaries | |
| <input type="checkbox"/> kidneys | |
| <input type="checkbox"/> pericardial cavity | |
| <input type="checkbox"/> heart | |
| <input type="checkbox"/> ♥ atrium (need signature from me to get Bonus pt _____) | |
| <input type="checkbox"/> ♥ ventricle (need signature from me to get Bonus pt _____) | |

Look under a dissecting microscope. Draw and Describe a shark gill.

What might be the function of gill rakers?



Name _____

Class Chondrichthyes – Cartilaginous Fish

Dog Fish Shark Observations:

Locate and list the functions of the following fins:

Pectoral

Pelvic

Dorsal

Caudal

Define Heterocercal:

Draw your finger lightly over the sharks skin to feel the spines of the placoid scales.
Describe the structure of the scales.

Internal Anatomy of the Dogfish Shark

What large organ likely assists in keeping the shark buoyant?

What structure slows the passage of food through the gut?

Why might slowing the passage of food be beneficial for the digestive process?

What organ is formed around the posterior end of the J-shaped stomach?

What gland is specific to the cartilaginous fishes and helps regulate the fishes' salt imbalance?

What organ functions as the primary source of red blood cell production?

Name and explain the type of development observed with dogfish sharks.

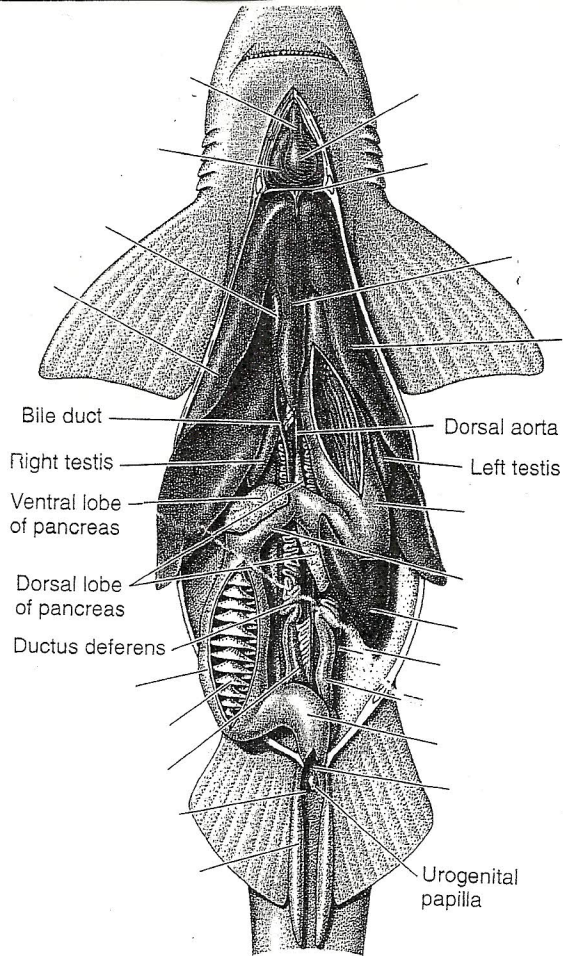


Figure 18-6

Internal anatomy of a dogfish shark, ventral view. What large organ likely assists in keeping the shark buoyant? _____ What structure slows the passage of food through the gut? _____ What organ is formed around the posterior end of the J-shaped stomach? _____ What gland is specific to the cartilaginous fishes and helps regulate the fishes' salt imbalance? _____ What organ functions as the primary source of red blood cell production? _____

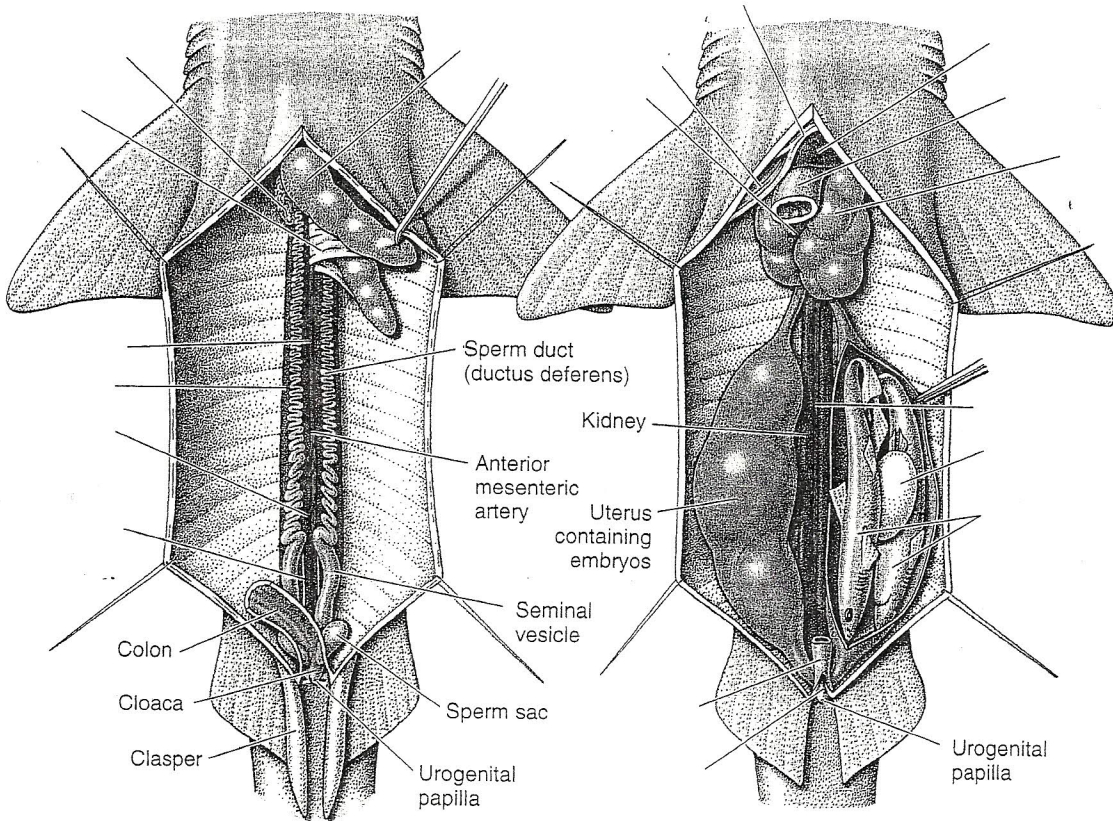


Figure 18-7

Urogenital system of a dogfish shark. Left, Male. Right, Female.