

BIOLOGY 306 CHORDATE ANATOMY

LAB # 2

Anatomy of the Dogfish Shark:

External Anatomy, Muscular System, Body Cavities and Mesenteries, Digestive and Respiratory Systems, Urogenital System

QUIZ Fig. 15.7 (p 124); Fig. 19.8 (p. 162)

I. ANATOMY OF THE DOGFISH SHARK

A. EXTERNAL ANATOMY & INTEGUMENTARY SYSTEM, Chapter 15 p. 121-127

OMIT Integumentary System

Find the following structures:

rostrum	nostrils
subterminal mouth	incurrent aperture
teeth	excurrent aperture
heterocercal caudal fin	eyes,
keel	upper eyelid
anterior dorsal fin	lower eyelid
posterior dorsal fin	spiracle
pectoral fins	gill slits
pelvic fins	endolymphatic ducts
caudal fin	cloaca
claspers (males)	urogenital papilla (male)
placoid scales	urinary papilla (female)
ampullae of Lorenzini	abdominal pores
lateral line system	

B. MUSCULAR SYSTEM, Chapter 17 p. 141-151

Accomplish entire exercise.

Learn the actions of all the muscles studied.

Find the following structures:

Trunk (epaxial and hypaxial) Muscles

Pectoral Fin Muscles

extensor (abductor)

flexor (adductor)

Pelvic Fin Muscles

extensor (abductor)

flexor (adductor)

Branchiomic Muscles

Visceral Arch I

levator palatoquadrati

spiracularis

intermandibularis

adductor mandibulae

Visceral Arch II	
second dorsal constrictor	interhyoideus
Visceral Arches III-VIII	
cucullaris	dorsal superficial constrictors
ventral superficial constrictors	
Hypobranchial Muscles	
coracomandibularis	coracoarcual
coracohyoid	coracobranchial

C. DIGESTIVE AND RESPIRATORY SYSTEMS, Chapter 19 p. 159-168.

Accomplish entire exercise.

Digestive System- Find the following structures:

teeth	stomach	anus
oral cavity	papillae (of esophagus)	cloaca
tongue	rugae	coprodeum
pharynx	duodenum	urodeum
spiracle	valvular intestine	rectal gland
internal gill slits	spiral valve	
esophagus	rectum	

Accessory Digestive Organs

Liver (left lobe, right lobe, median lobe)	gall bladder
bile duct	spleen
pancreas (dorsal and ventral lobe)	

Respiratory System

spiracle	internal gill slits
gill chamber	gill rakers
gill arch	interbranchial septum
gill rays	primary gill filaments

D. UROGENITAL SYSTEM, Chapter 20 p. 169-174.

Accomplish entire exercise.

Find the following structures:

kidneys	ovaries
oviducts	uterus
cloaca	urinary papilla
testes	ductus deferens
sperm sac	urogenital papilla
claspers	