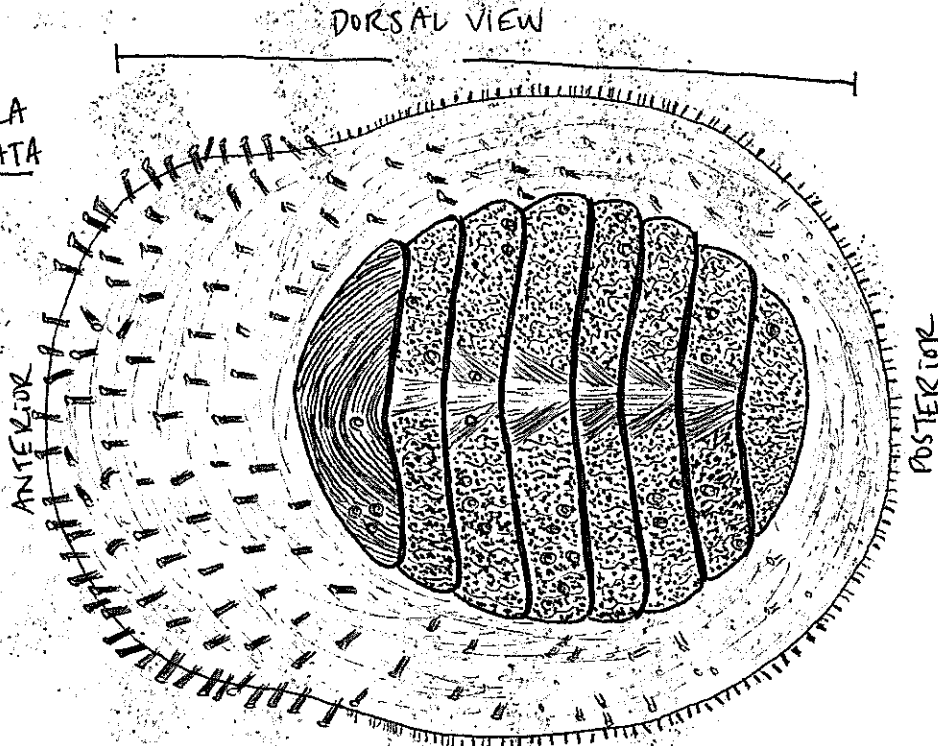


PHYLUM MOLLUSCA: CLASS POLYPLACOPHORA

04.27.17

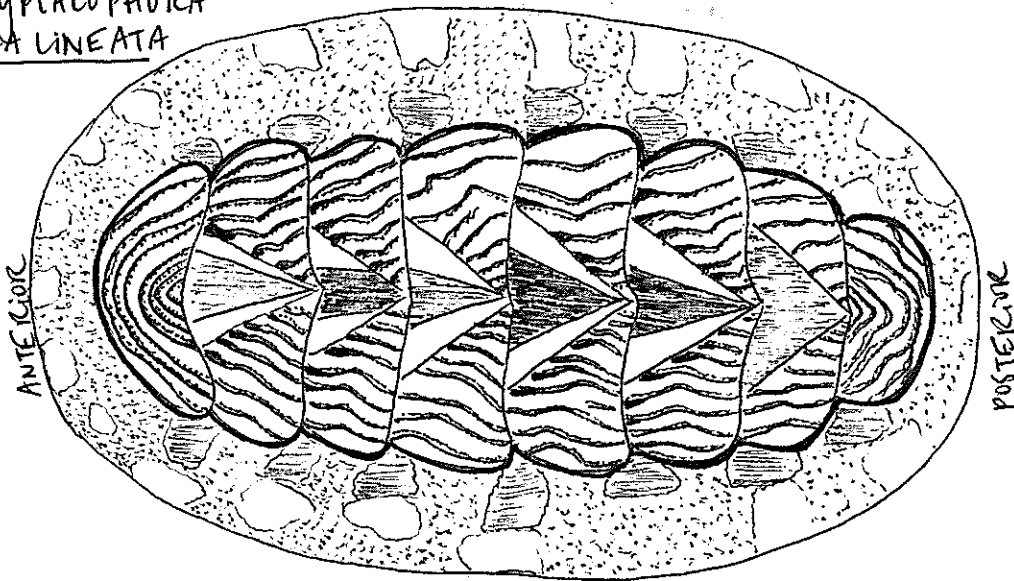
DIVERSITY:

PHYLUM MOLLUSCA
CLASS POLYPLACOPHORA
PLACIPHORELLA VELATA



NOTES: THE "CARNIVOROUS CHITON" HAS A "VEILED" ANTERIOR GIRDLE (CREAMY WHITE); VALVES SHORT + WIDE; LONG DORSAL SCALEY HAIRS / BRISTLEY PROJECTIONS EXTENDING LATERALLY
→ TO FEED: TRAPS SMALL ORGANISMS UNDER VEIL W/ RAPID "STOMPING" ACTION

PHYLUM MOLLUSCA
CLASS POLYPLACOPHORA
TONICELLA LINEATA

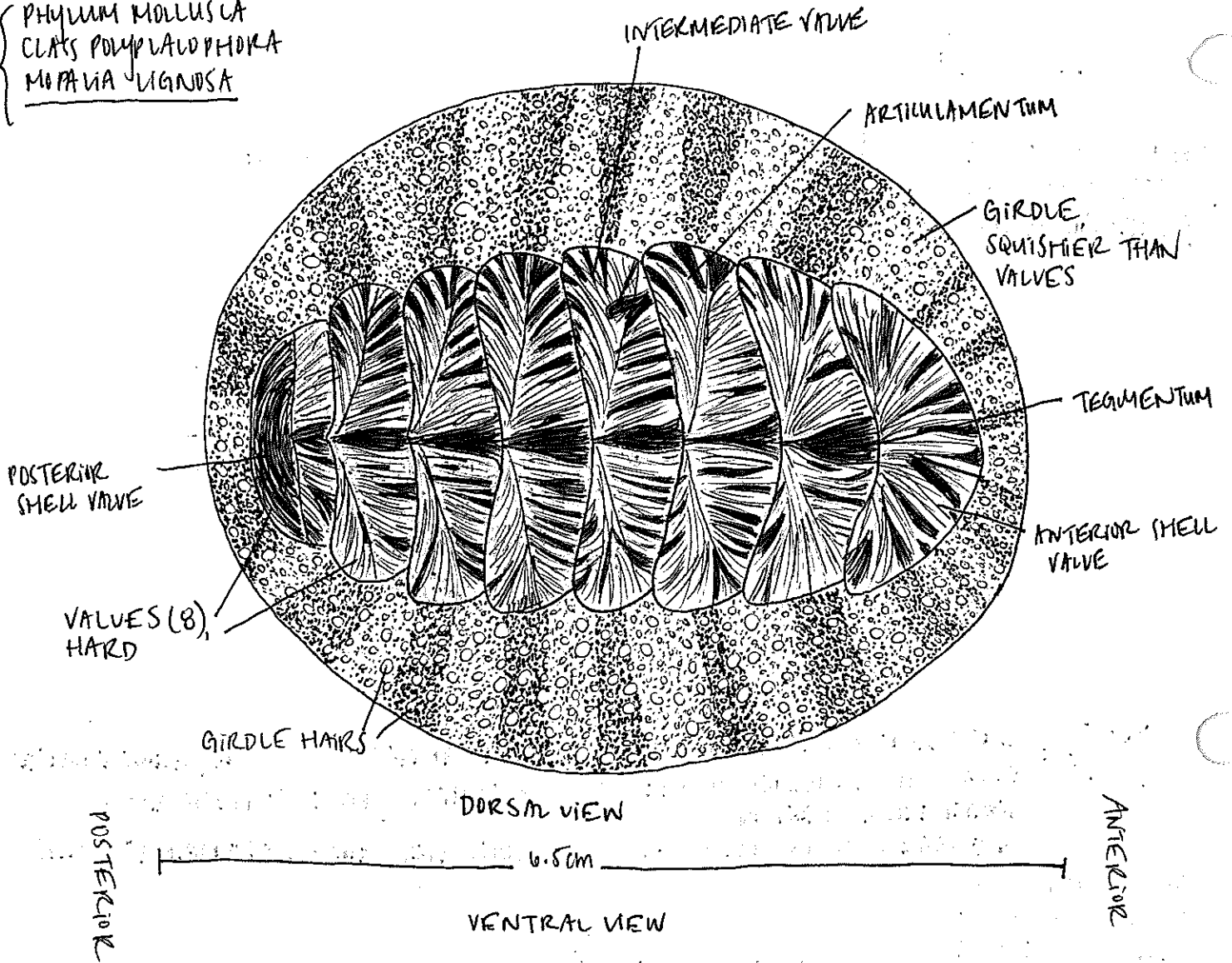


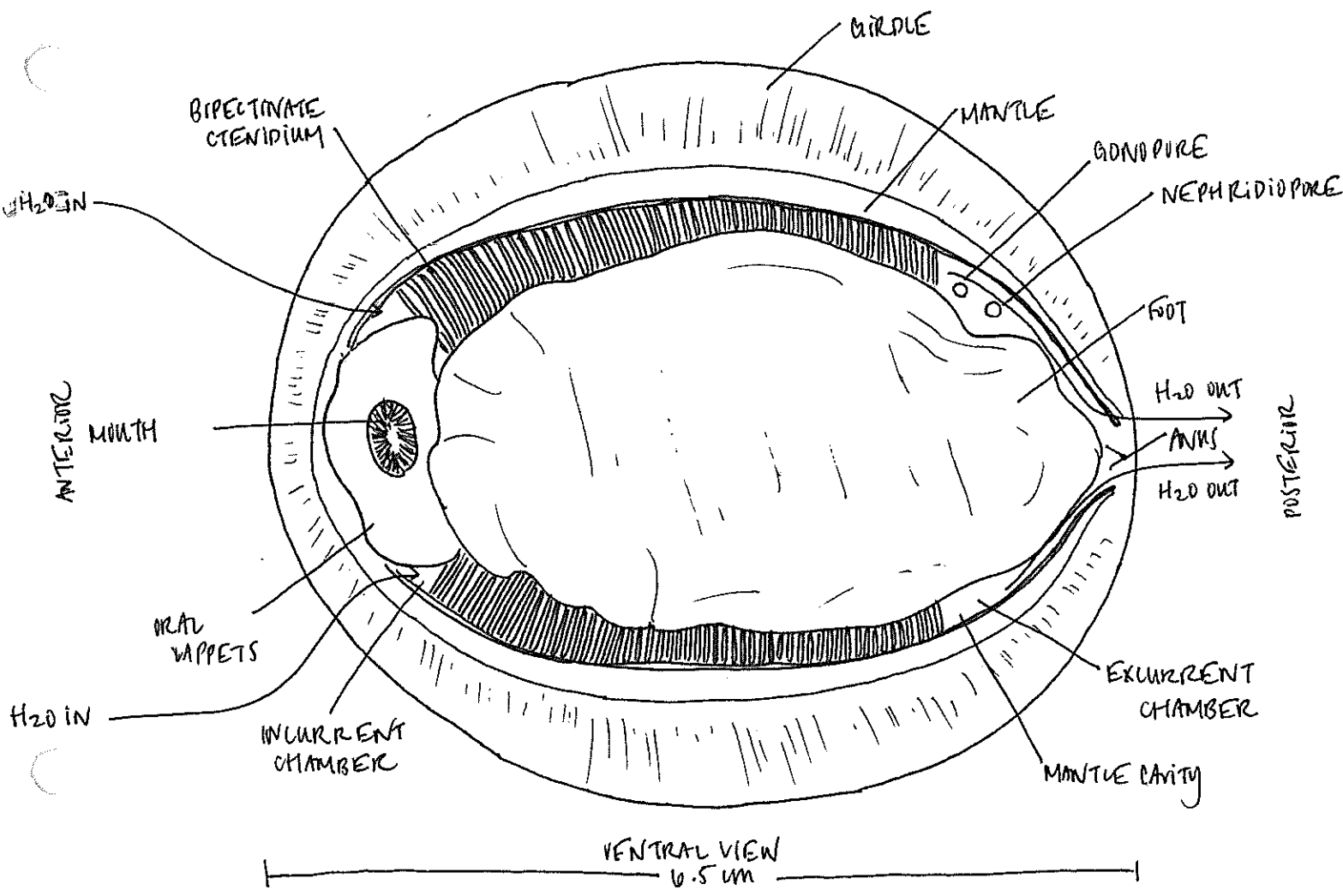
DORSAL VIEW

NOTES: DISTINCT BLUE | YELLOW | BROWN LINED PATTERN ON VALVES, MEDIAL PARTS OF WHICH HAVE PURPLE | BROWN TRIANGLES; GIRDLE BRIGHT PINK | PURPLE W/ YELLOW SPOTS; THIS ORGANISM WAS THE LARGEST WE COLLECTED - MOST ~ 2 CM IN FIELD

② MORPHOLOGY:

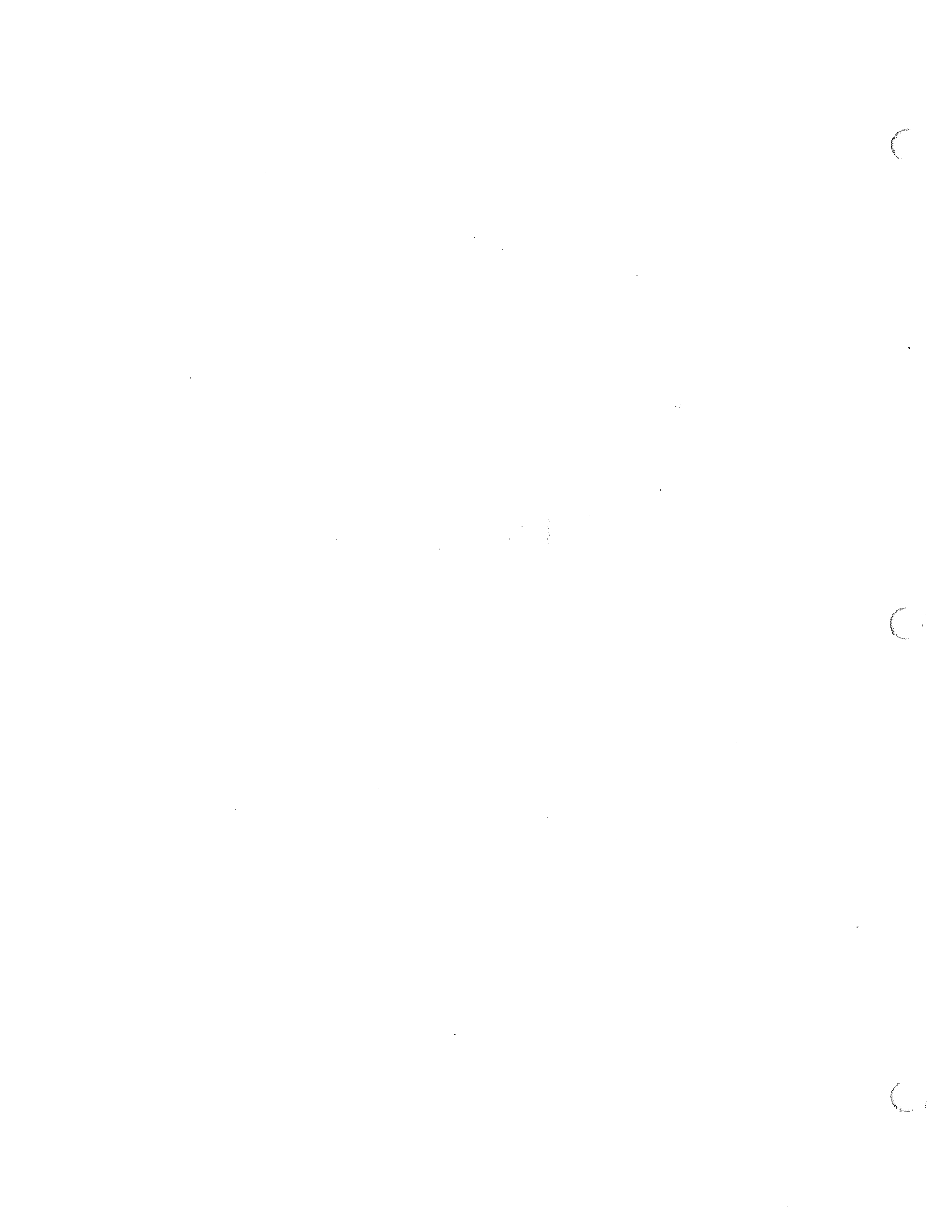
PHYLUM MOLLUSCA
CLASS POLYPLAOPHORA
MORPHIA LIGNOSA





(III) MOVEMENT:

* FOOT FORMS A LARGE SUCTION CUP TO CLING TO SUBSTRATE; MY ANIMAL DIDN'T MOVE AROUND A LOT, BUT IF IT DID, MUCH OF THE MOVEMENT WOULD HAVE ORIGINATED FROM THE MIDDLE OF THE FOOT.

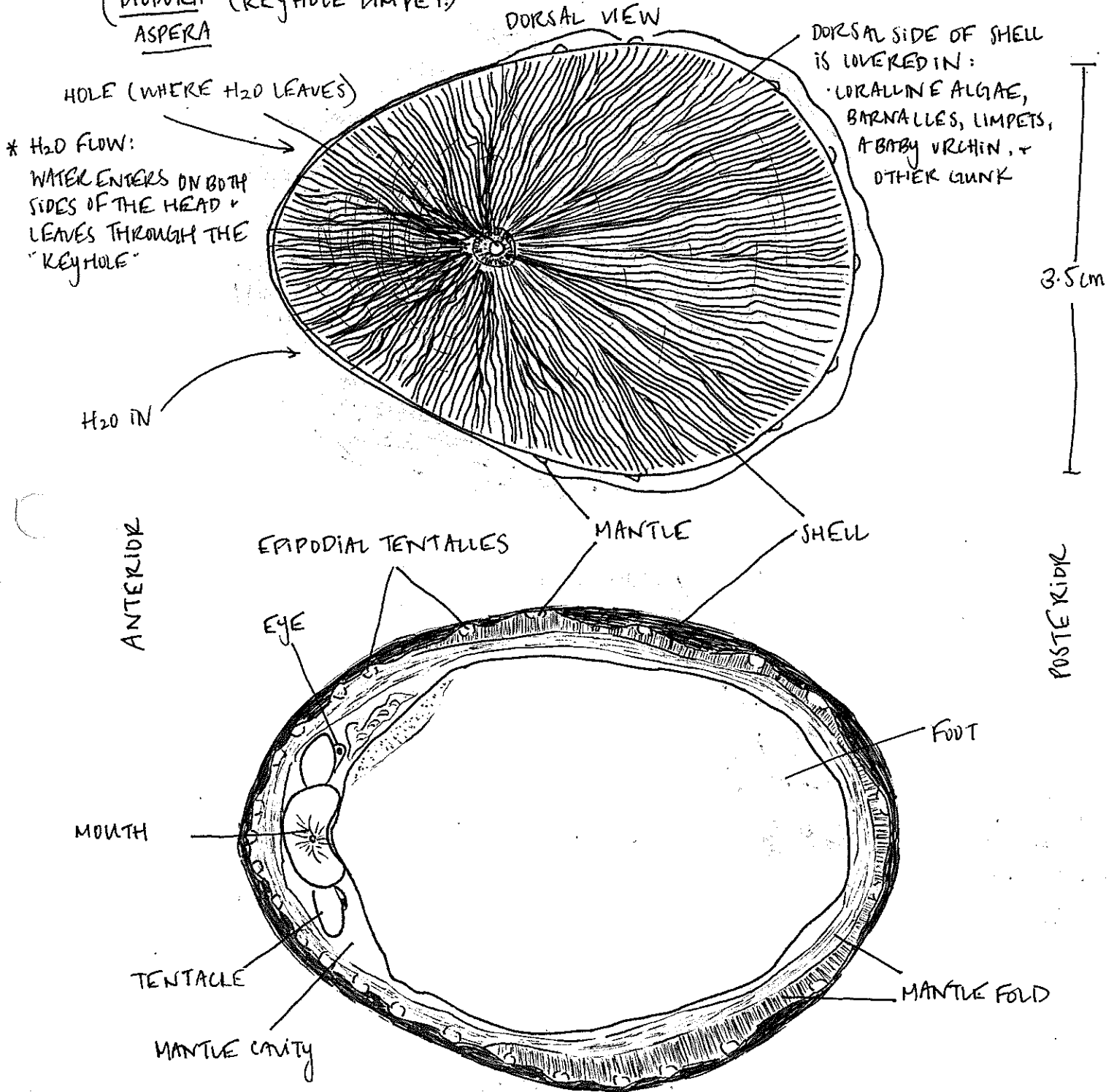


PHYLUM MOLLUSCA: CLASS GASTROPODA

// 05.02.17

ANATOMY

PHYLUM MOLLUSCA
 CLASS GASTROPODA
 SUBCLASS VESTIGASTROPODA
 DIODORA (KEYHOLE LIMPET!)
ASPERA



NOTES:

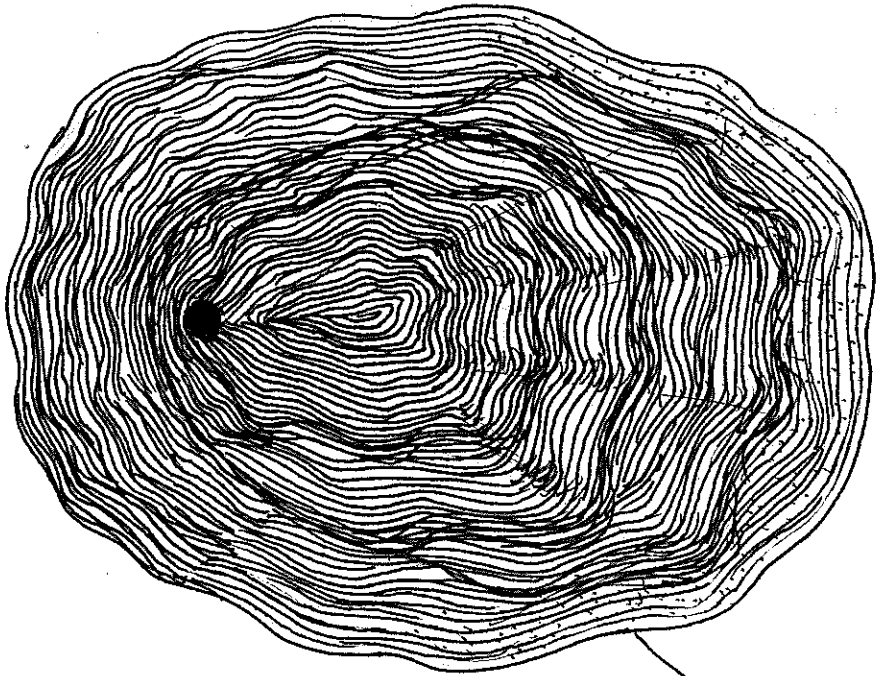
VENTRAL VIEW

- * HAS COMMENSAL SCALEWORM ARCTONOE LIVING IN MANTLE CAVITY (WRAPPED AROUND SIDE); CTENIDIA NOT VISIBLE
- * 2 BIPECTINATE CTENIDIA + 2 NEPHRIDIA → PRIMITIVE

PHYLUM MOLLUSCA
 CLASS GASTROPODA
 SUBCLASS PATELLOGASTROPODA
 LOTTIA VERTA

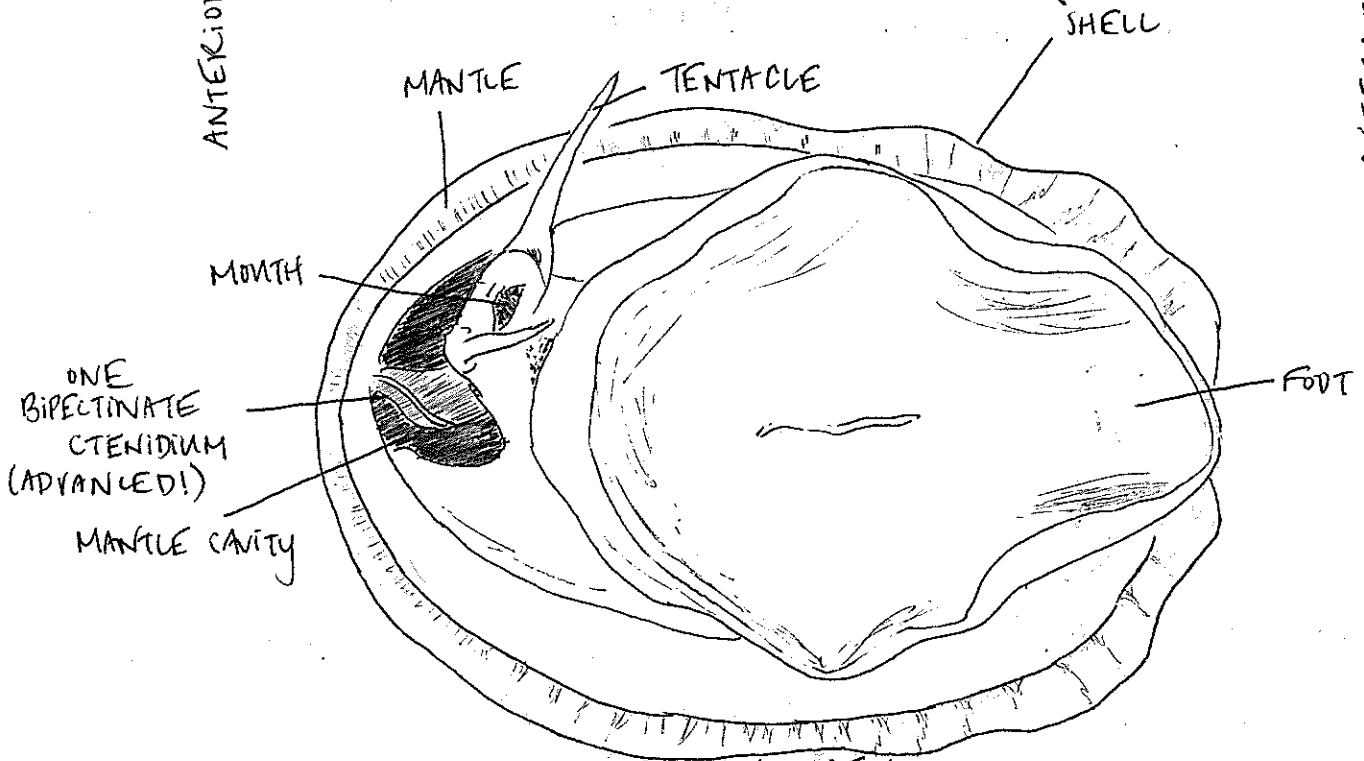
H₂O FLOW:

DORSAL VIEW



ANTERIOR

POSTERIOR

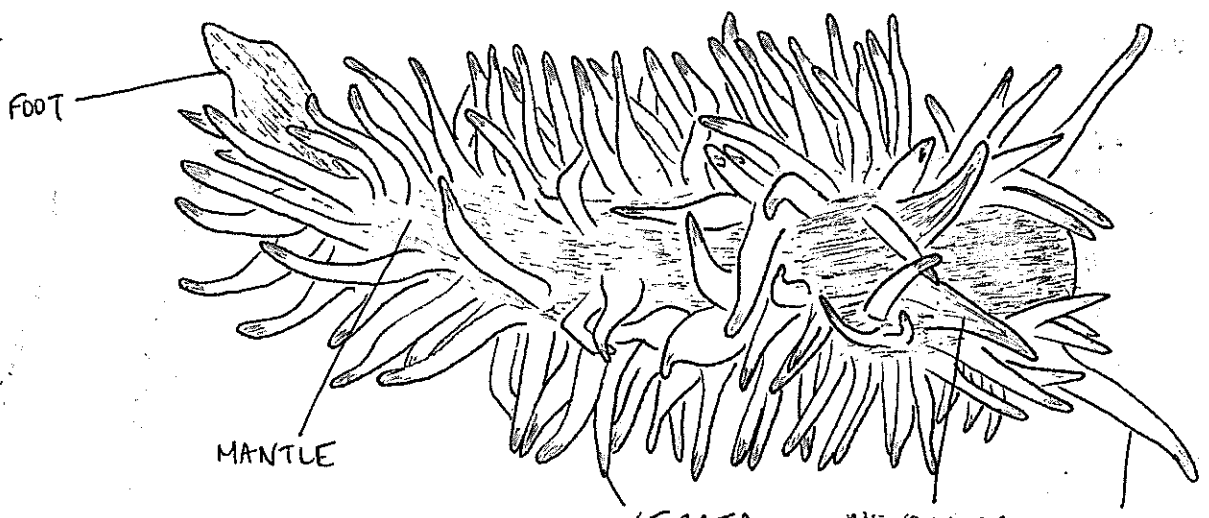


VENTRAL VIEW

NOTES: *COLOR: shell is brown and pretty bright (like eelgrass) green! Wavy shell, almost like a mountain range in a valley - concentric "circular" bands of color moving up shell.

PHYLUM MOLLUSCA
 CLASS GASTROPODA
 SUBCLASS HETEROBRANCHIS
 AEOLEIDIA PAPILLOSA

1.8 cm

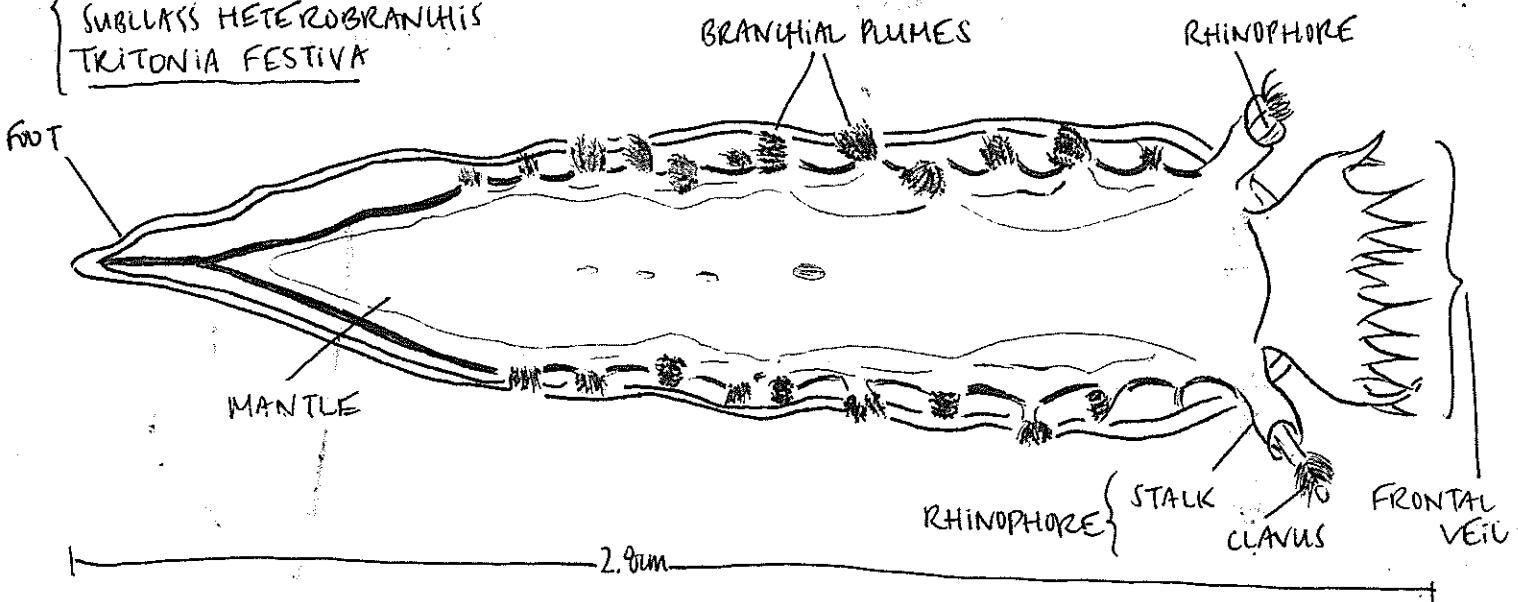


POSTERIOR

NOTES: * COLOR: TRANSLUCENT, PINK MANTLE + PINK-TIPPED CERATAE.
 → TAKES ON COLOR OF FOOD - ANEMONES! (METRIDUM)
 * MOVEMENT: FAST! ALSO RESPONDS TO TOUCH; PREFERS EDGE OF BOWL

ANTERIOR

PHYLUM MOLLUSCA
 CLASS GASTROPODA
 SUBCLASS HETEROBRANCHIS
 TRITONIA FESTIVA

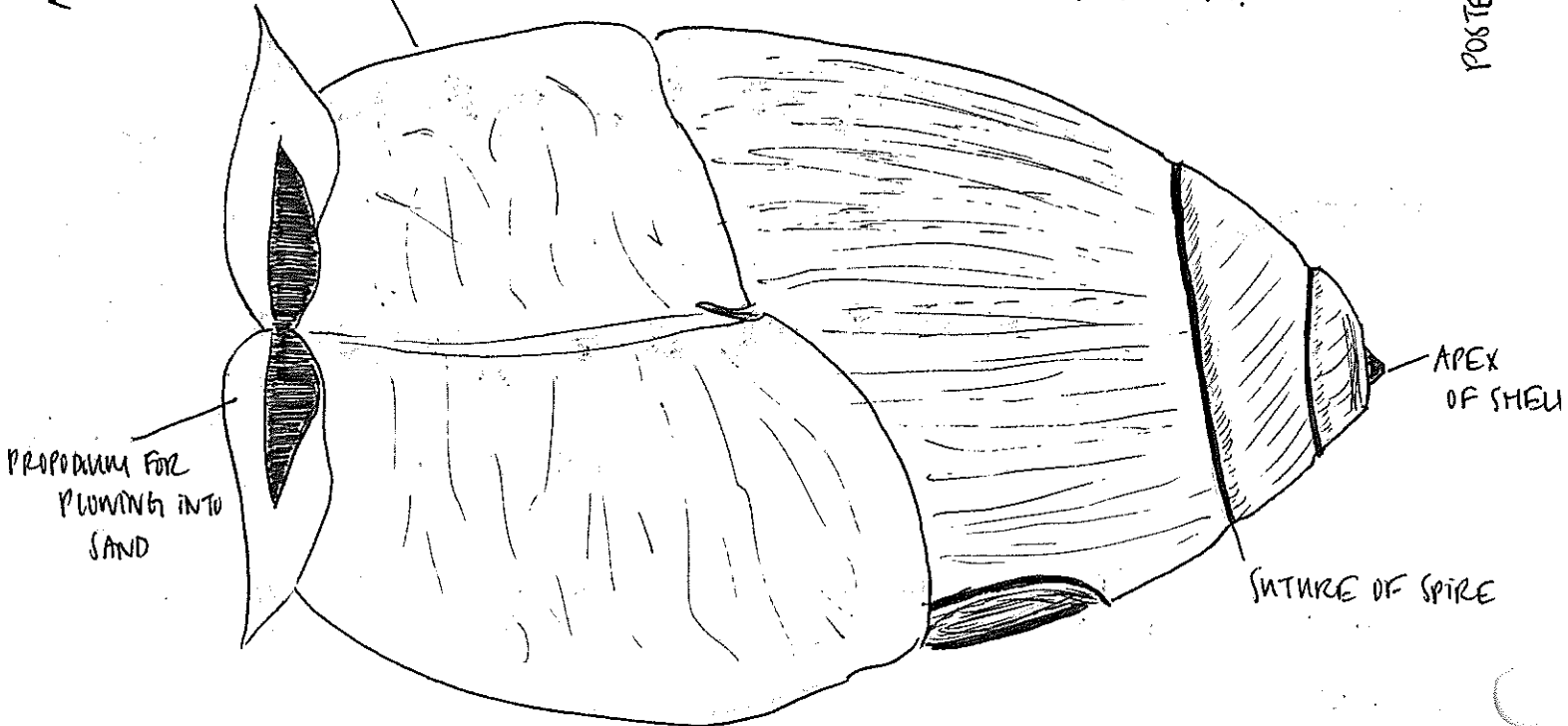
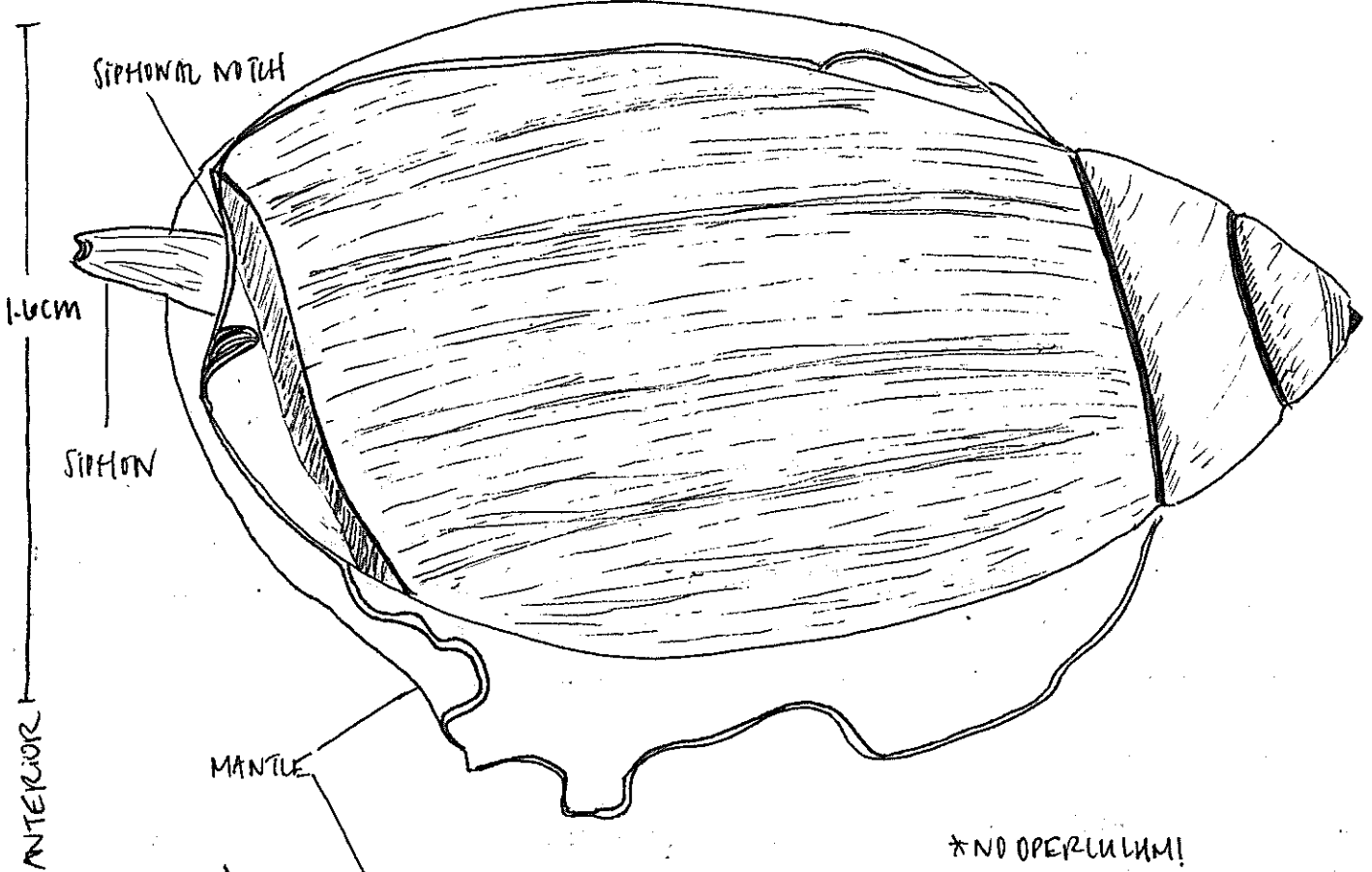


NOTES: * COLOR: CREAMY OPAQUE BODY w/ WHITE LINES + BRANCHIAL PLUMES / VEIL
 * ECOLOGY: FEED ON PINK GORGONIAN + ORANGE SEA PEN (SUBTIDAL) + CAVULARIA (INTERTIDAL)
 * MOVEMENT: RESPONDS TO TOUCH; WILL MOVE IN OPPOSITE DIRECTION
 * EATS w/ ORAL TENTACLES, MOUTH, RADULA; RESPIRES USING BRANCHIAL PLUMES
 * COMPARED TO PROIBRANCHIS: NO SHELL! NO OPERCULUM! BODY NOT TORTED

PHYLUM MOLLUSCA
 CLASS GASTROPODA
 SUBCLASS CAENOGASTROPODA

OLIVELLA BIPLACATA - OLIVE SNAIL - COLLECTED @ SOUTH COVE @ A VERY LOW TIDE

DORSAL VIEW

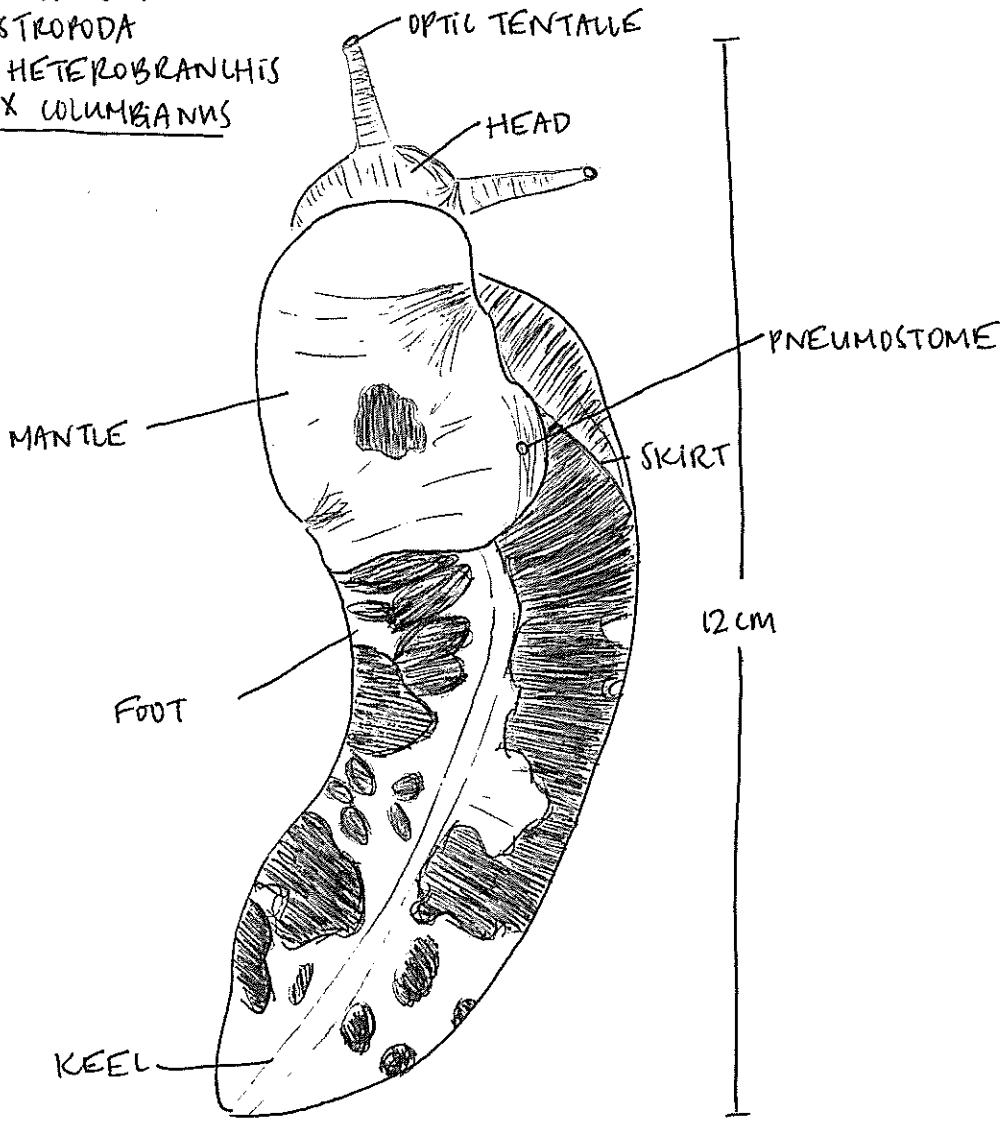


VENTRAL VIEW

NOTES: * SHELL: PURPLE LINED, w/ YELLOW ACCENTS; OVERALL GREYISH PURPLE - SHINY!!
 (ON SUTURE OF SPIRE)

* MOVEMENT: MANTLE MOVING AROUND A LOT (TRYING TO BURROW?), RESPONDS TO TOUCH

PHYLUM MOLLUSCA
 CLASS GASTROPODA
 SUBCLASS HETEROBRANCHIA
ARIDIMAX COLUMBANA



NOTES: * COLOR: PUKE GREEN w/ DARK BROWN SPLOTCHES; SHINY SURFACE w/ SLIME
 * MOVEMENT: PRETTY FAST FOR A SLUG! WILL ELONGATE ITS BODY A LOT! AND LEAVES BEHIND A LOT OF SLIME.

→
 MORE ON BACK

⑩ OTHER IDENTIFICATION / OBSERVATION:

PHYLUM MOLLUSCA
CLASS GASTROPODA
SUBCLASS VESTIGASTROPODA
HALIOTIS RUFESCENS

- * NACREOUS LAYER = pearly inner surface!
- * PRISMATIC LAYER = thickest part of shell → not really visible
- * PERIOSTRACUM = red surface on outside!

* 5 HOLES; FUNCTION = exit point of water flow

* DISADVANTAGES: Boring organisms can penetrate the top of the shell via these holes; in intertidal could cause desiccation

PHYLUM MOLLUSCA
CLASS GASTROPODA
SUBCLASS VESTIGASTROPODA
TEGULA FUNEBRALIS

* EPIBIONTS: organism I observed did not have any epibionts; typically, Lolipella, Notornica, Crepidula typically found there. And, Pagurus hermit crabs inhabit dead shells.

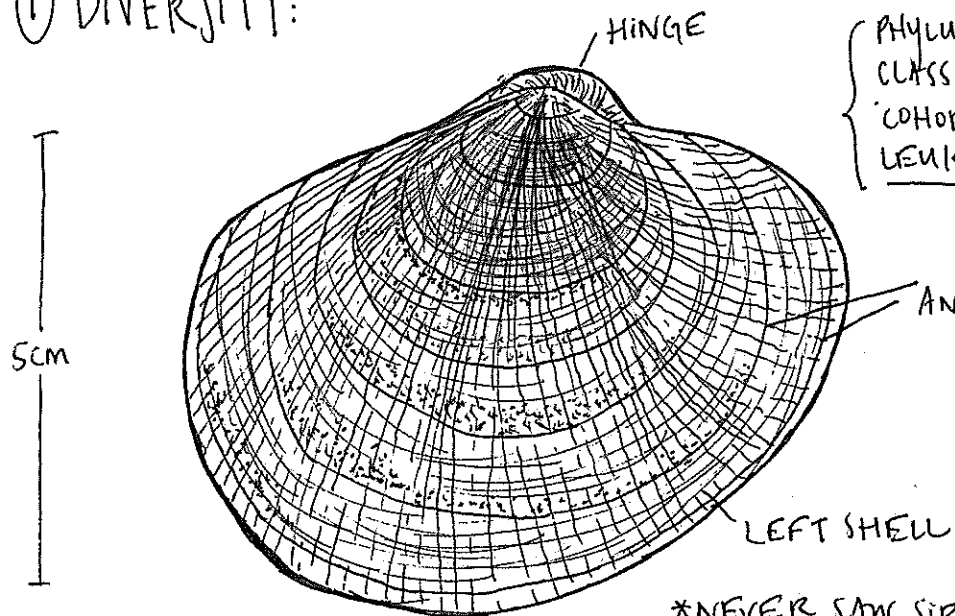
PHYLUM MOLLUSCA
CLASS GASTROPODA
SUBCLASS CAENOGASTROPODA
FASITRION OREGONENSIS

* WHEEL: Examined ✓; siphon / siphonal canal — for breathing, bringing H₂O into mantle cavity / across gills

PHYLUM MOLLUSCA: CLASS BIVALVIA

// 05.04.17

① DIVERSITY:

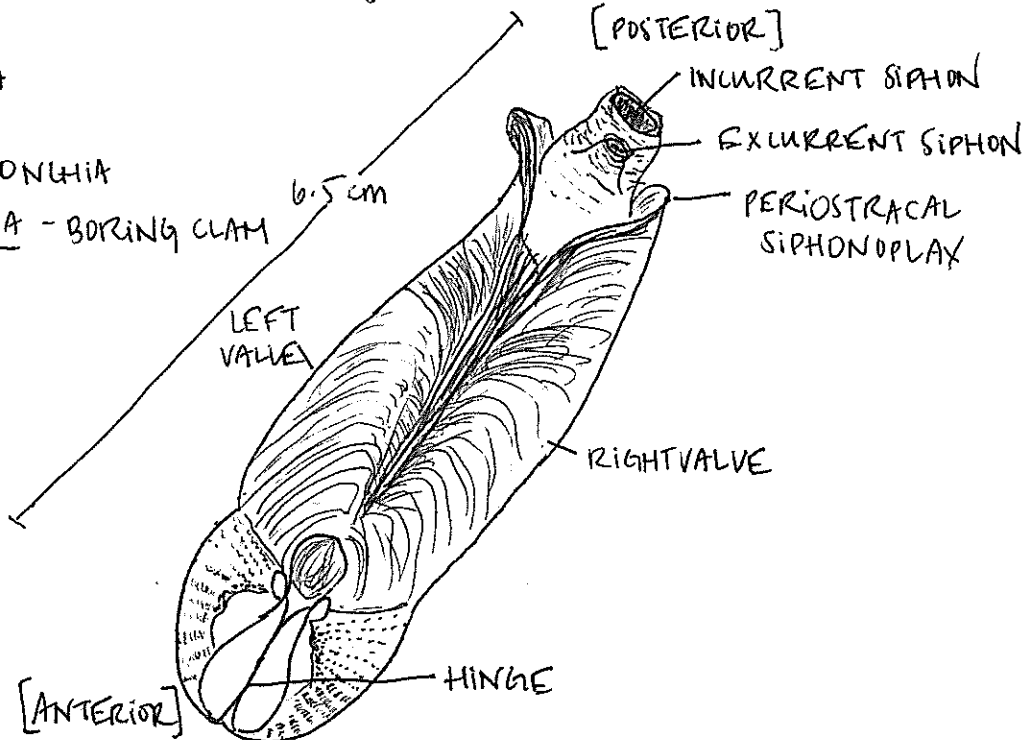


PHYLUM MOLLUSCA
 CLASS BIVALVIA
 "COHORT" HETERODONCHIA
 LEUKOMA STAMINEA - LITTLE NE

NOTES: * COLOR: TAN, WITH BLUE STRIPES AROUND ANNULI
 * BEHAVIOR: AN INCREDIBLY PATIENT ORGANISM; NEVER OPENED FOR ME
 * TEXTURE: CONSISTENT - LINES VERY CLEAN + DEFINED; NOT FOULED w/ EPIBIONTS

* NEVER SAW SIPHONS AFTER 3+ HOURS;
 UNSURE OF ANTERIOR/POSTERIOR ORIENTATION

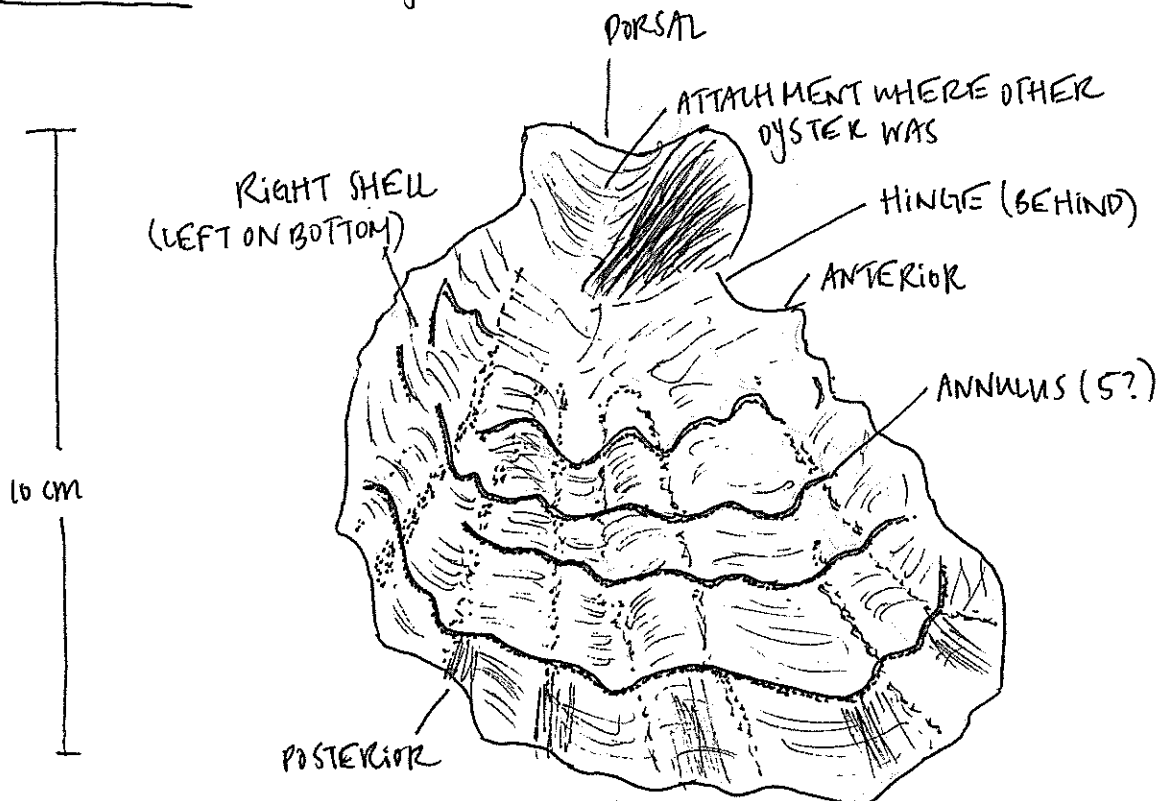
PHYLUM MOLLUSCA
 CLASS BIVALVIA
 "COHORT" HETERODONCHIA
 PENITILLA PENITA - BORING CLAM



* THIS ORGANISM BORES INTO ROCKS! SUSPENSION FEEDER.

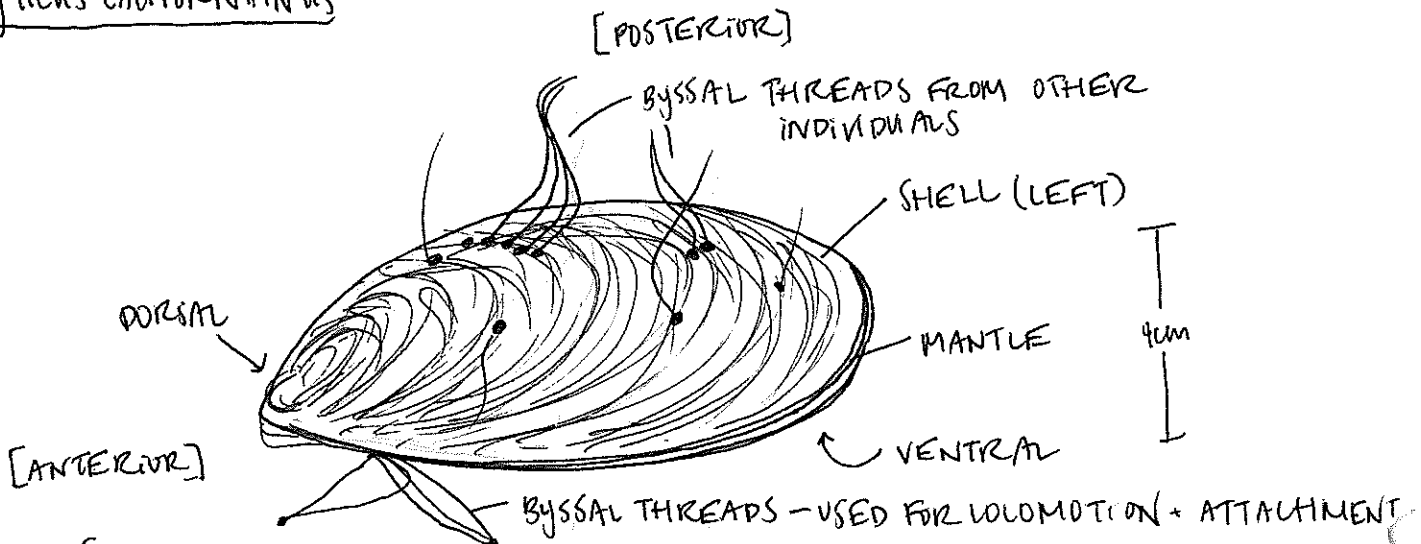
NOTES: * COLOR: SHELL WHITE; PERIOSTRACAL SIPHONOPLAX OPAQUE BROWN;
 SIPHONS CREAMY TAN w/ REDDISH BROWN LINES + SPOTTING
 * BEHAVIOR: HAPPILY STICKING ITS SIPHONS OUT BUT WILL RETRACT WHEN TOUCHED.
 IDENTIFIED SIPHONS BY INJECTING w/ FLOURDUSTINE + WATCHING FLOW.

PHYLUM MOLLUSCA
 CLASS BIVALVIA
 "COHORT" PTERIOMORPHA
CRASSOSTREA GIGAS: JAPANESE OYSTER



NOTES: * COLOR: CREAM, WITH GREEN ALGAE + BROWN STRIPES
 * TEXTURE: WAVY, IRREGULAR; ANNULLI WELL DEFINED

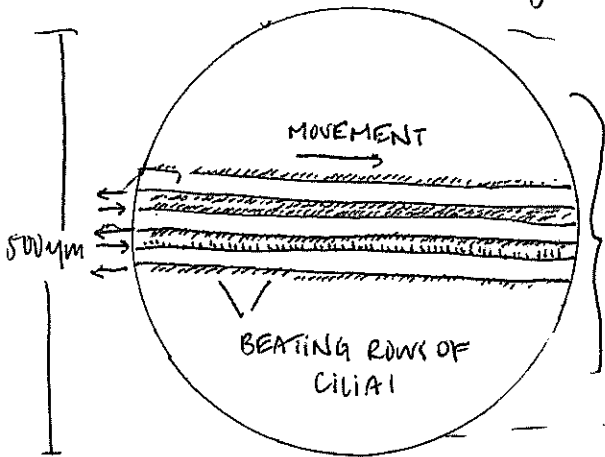
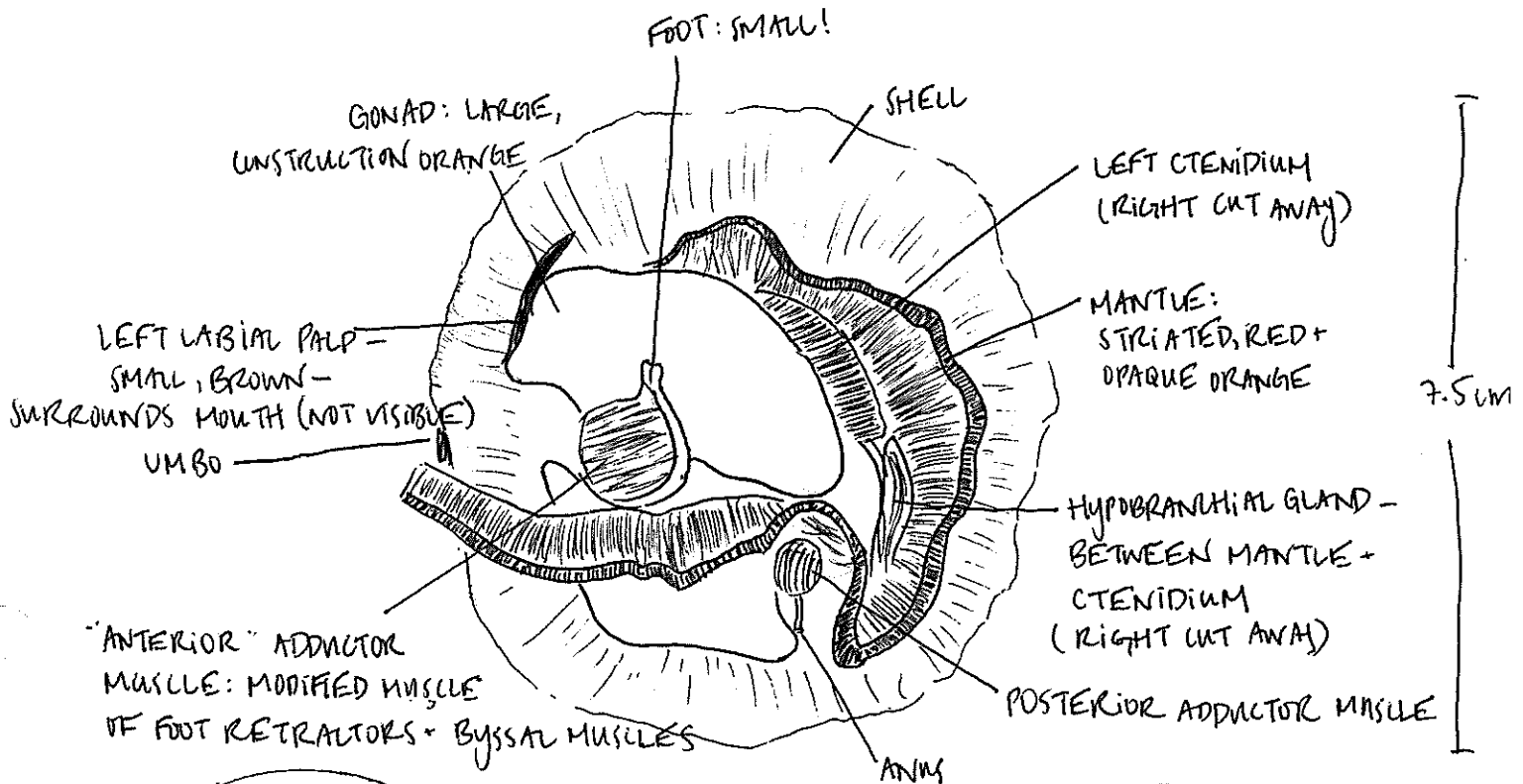
PHYLUM MOLLUSCA
 CLASS BIVALVIA
 "COHORT" PTERIOMORPHA
MYTILUS CALIFORNIANUS



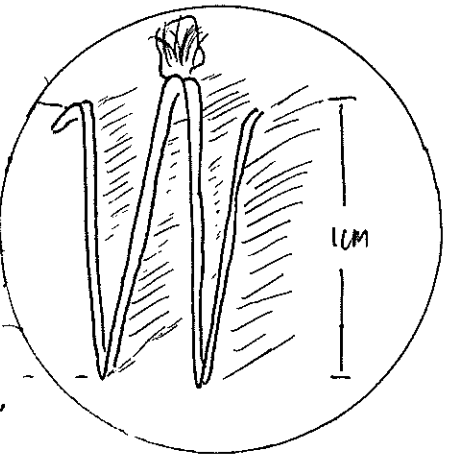
NOTES: * COLOR: DARK BROWN SHELL, ALMOST BLACK, w/ ORANGE MANTLE "LIPS"
 * TEXTURE: FAIRLY SMOOTH; BYSSAL THREADS TOUGH
 * BEHAVIOR: CAN SEE THE VERY SLOW "REACHING" MOVEMENT OF THE BYSSAL THREADS

DISSECTION:

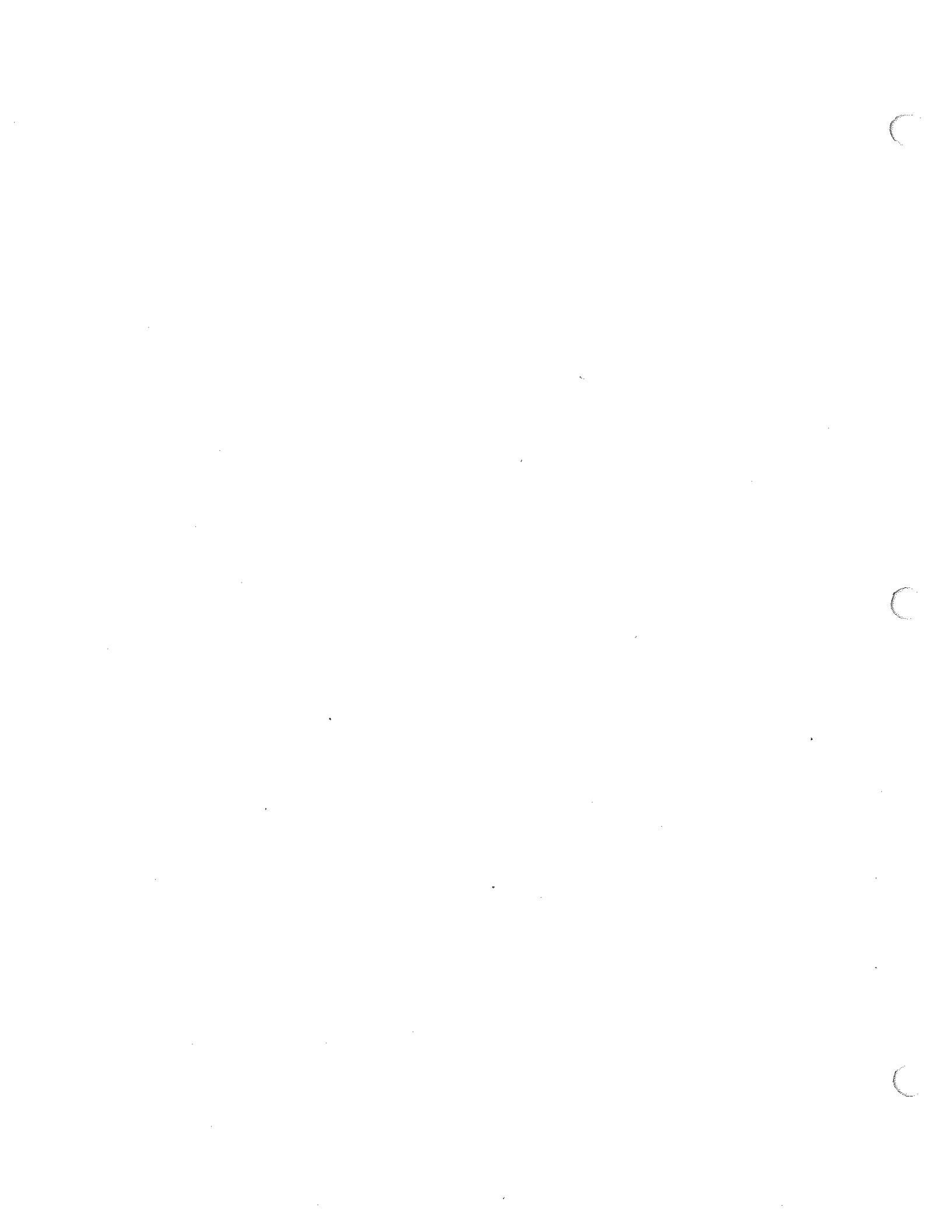
PHYLUM MOLLUSCA
 CLASS BIVALVIA
 "COHORT" PTERIOMORPHA
 PODESMUS MACROCHISMA "JINGLE CLAM"



CROSS-SECTION THRU LEFT CTENIDIUM
 COMPOUND VIEW THRU ONE SHEET OF THE "W" LAMELLAE

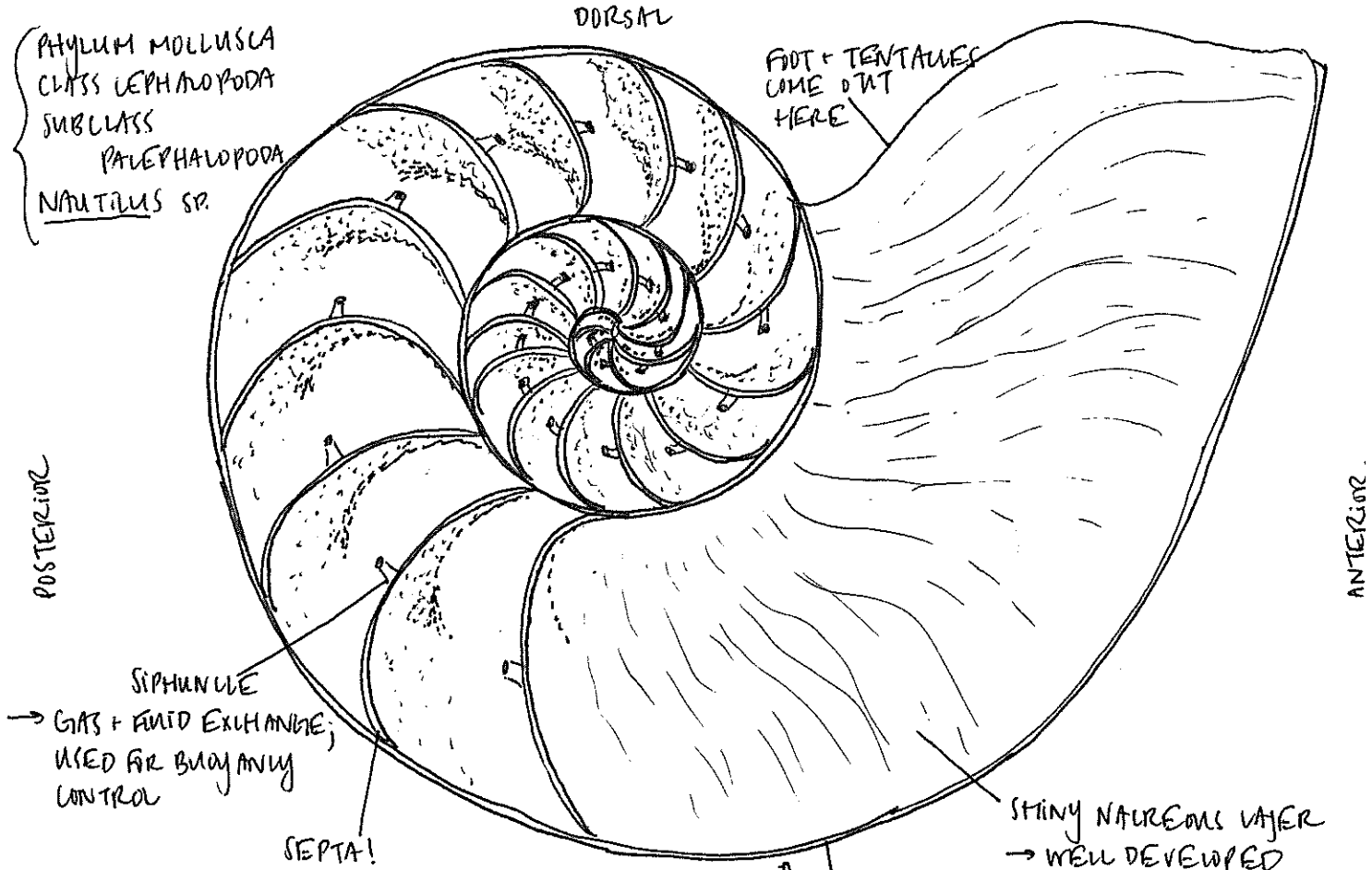


NOTES: * COLOR: SEE DESCRIPTIONS ABOVE; SHELL DISTINCTLY "PEARLY"
 * BEHAVIOR: SHELL WAS ALREADY SMASHED - DID NOT GET TO OBSERVE H₂O FLOW. STRUCTURES WERE MUCH MORE CRYPTIC/LESS PRONOUNCED THAN IN OTHER BIVALVES I'VE DISSECTED HOWEVER, MUSCLES STILL RESPONDED (BY CONTRACTION) TO STIMULI.
 * COMPARISON TO COHORT HETERO LONCHIA REPRESENTATIVE (TRESUS CAPAX):
 TRESUS'S FOOT MUCH LARGER (BIL USED FOR LOCOMOTION); HEART/PERICARDIAL CAVITY PRESENT + OBOVUS; SIPHONS PRESENT; ARRANGEMENT OF INTERNAL DIGESTIVE FEATURES NOT ANT → POST; INFANAL, NOT EPIFANAL; GONAD LESS % OF VISCERA



PHYLUM MOLLUSCA: CLASS CEPHALOPODA // 05.04.17

PHYLUM MOLLUSCA
 CLASS CEPHALOPODA
 SUBCLASS PALAEOCEPHALOPODA
 NAUTILUS SP.



(I) AMMONITES / NAUTILUS: ↑

* AMMONITE: WILED SHELL; CHAMBERS + SEPTA IDENTIFIED ✓

(II) CUTTLEFISH:

PHYLUM MOLLUSCA
 CLASS CEPHALOPODA
 SUBCLASS NEOCEPHALOPODA
 COHORT LOLEOIDEA
 ORDER SEPIIDA
 SEPIA

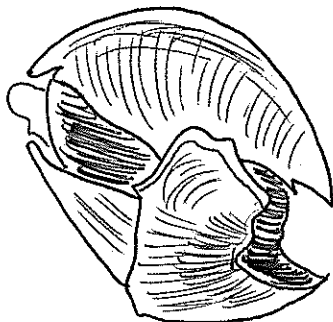
* CUTTLEBONE: REMNANT OF CUTTLEFISH

→ FUNCTION: BUOYANCY
 → LOCATION: IN THE MANTLE!

(III) SQUID + OCTOPUS:

PHYLUM MOLLUSCA
 CLASS CEPHALOPODA
 SUBCLASS NEOCEPHALOPODA
 ORDER TEUTHOIDEA
 POSIDILUS GIGAS

→ BEAK!



* PAPERED NAUTILUS: NOT NAUTILIDS; EGG CASE FROM PELAGIC OCTOPUS, WHICH DOES NOT BEAR A SHELL

* OBSERVED CHITINOUS RINGS:
 → FUNCTION = GRIPPING PREY
 → PRESENT? = NOT SURE; FORGOT TO LOOK :-)

* PEN:

→ FUNCTION = SUPPORT MUSCULAR TISSUES + ORGAN
 → LOCATION: VENTRAL PART OF MANTLE WALL

(IV) OCTOPUS DISSECTION!

10 CM

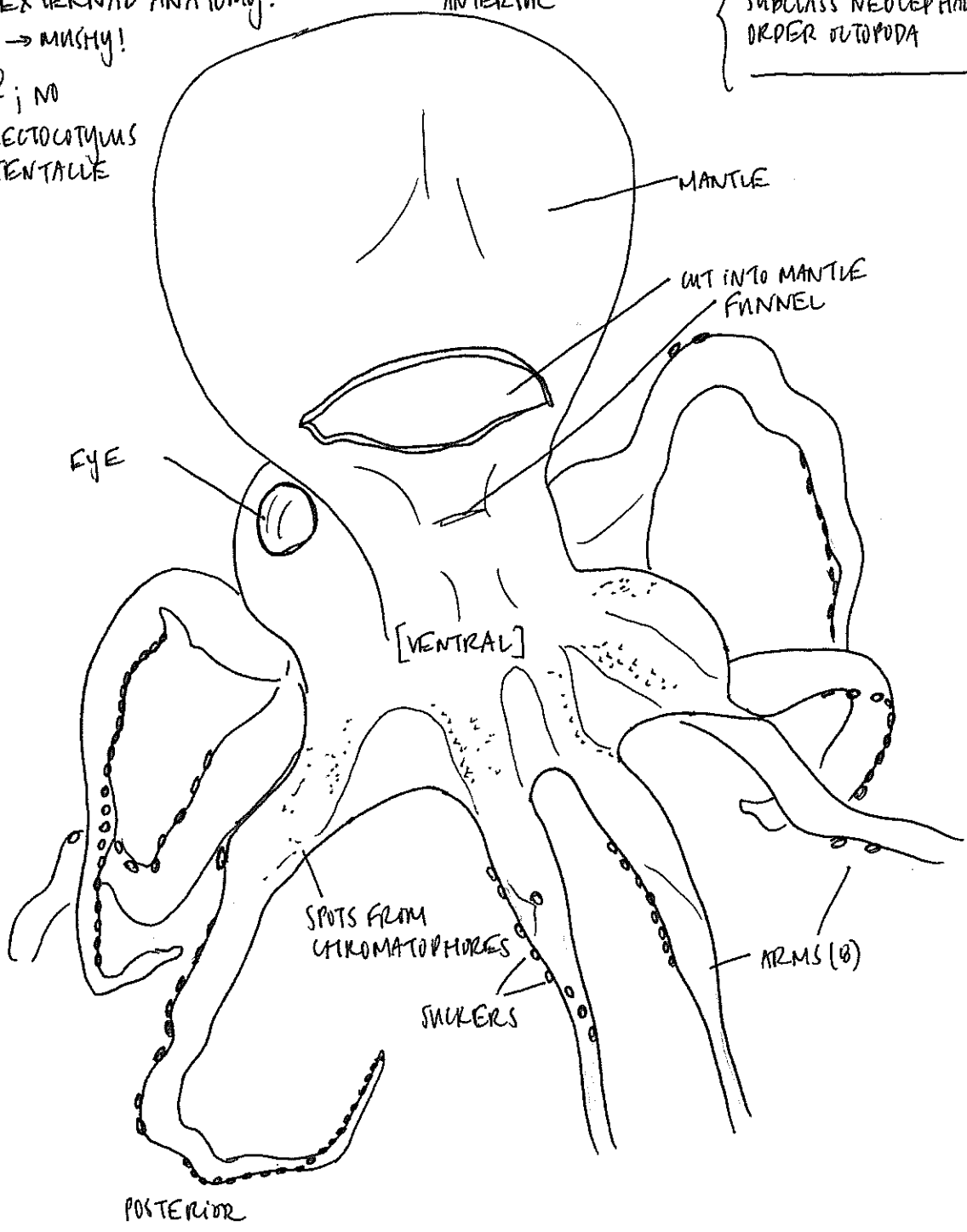
PHYLUM MOLLUSCA
CLASS CEPHALOPODA
SUBCLASS NEOCEPHALOPODA
ORDER OCTOPODA

EXTERNAL ANATOMY:

ANTERIOR

→ MUSHY!

♀; NO
HECTOCOTYLUS
TENTACLE



EYE

MANTLE

CUT INTO MANTLE
FUNNEL

[VENTRAL]

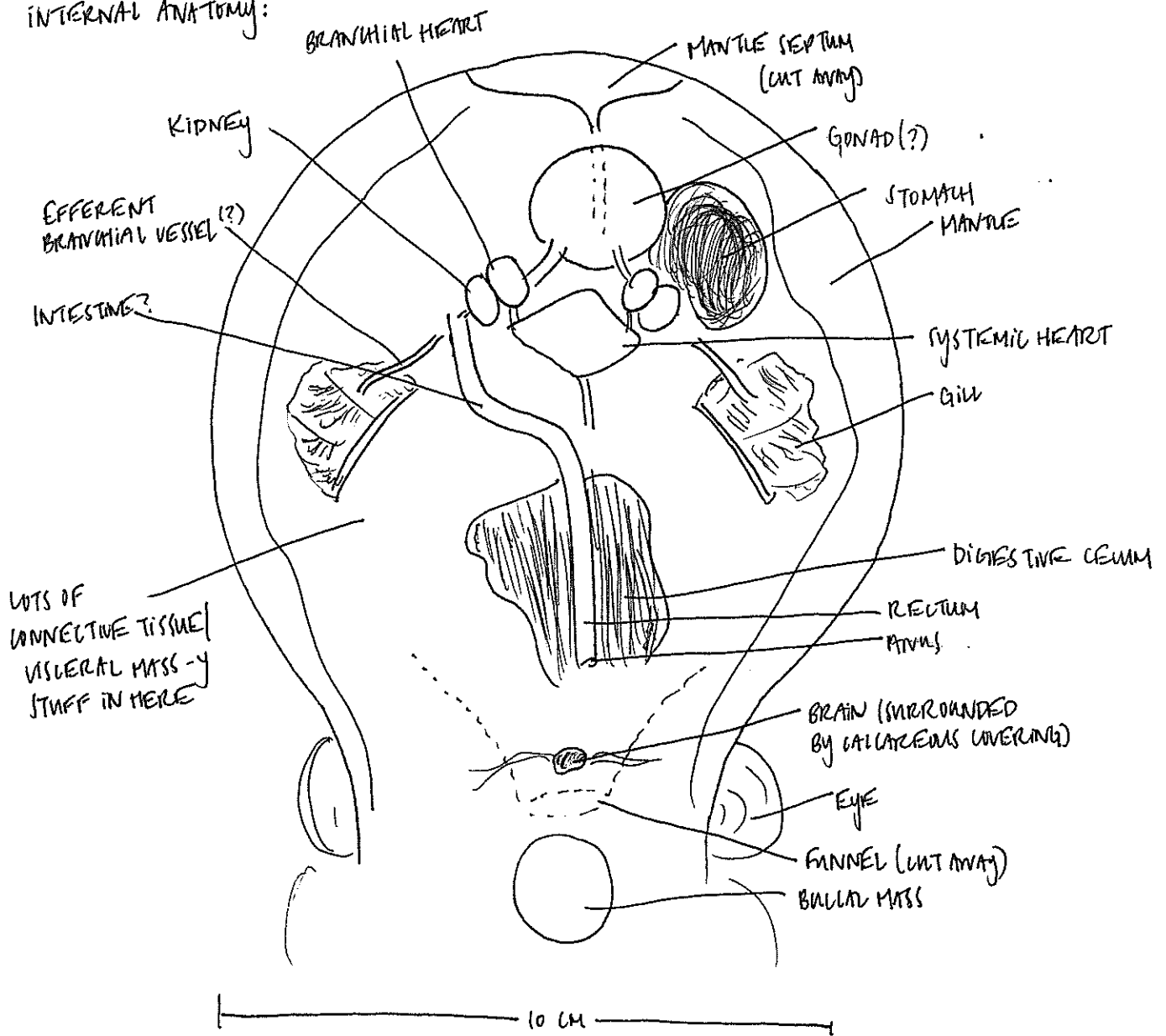
SPOTS FROM
CHROMATOPHORES

SUCKERS

ARMS (8)

POSTERIOR

INTERNAL ANATOMY:



NOTES: *ANSWERS TO QUESTIONS: ANAL FLAPS: Octopus did not seem to have (from what we could see); but, they are involved in the re-use of ink. INK SAC: we could not seem to confidently locate - somewhat the story of much of this dissection - a squishy Octopus, indeed! Made for quite the messy dissection. MUSCLES: Again, not obvious; much of what we saw was covered with connective tissue, making it challenging to keep all the structures straight. But, that is clearly an adaptation for keeping a complex internal anatomy sorted.

C

C

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