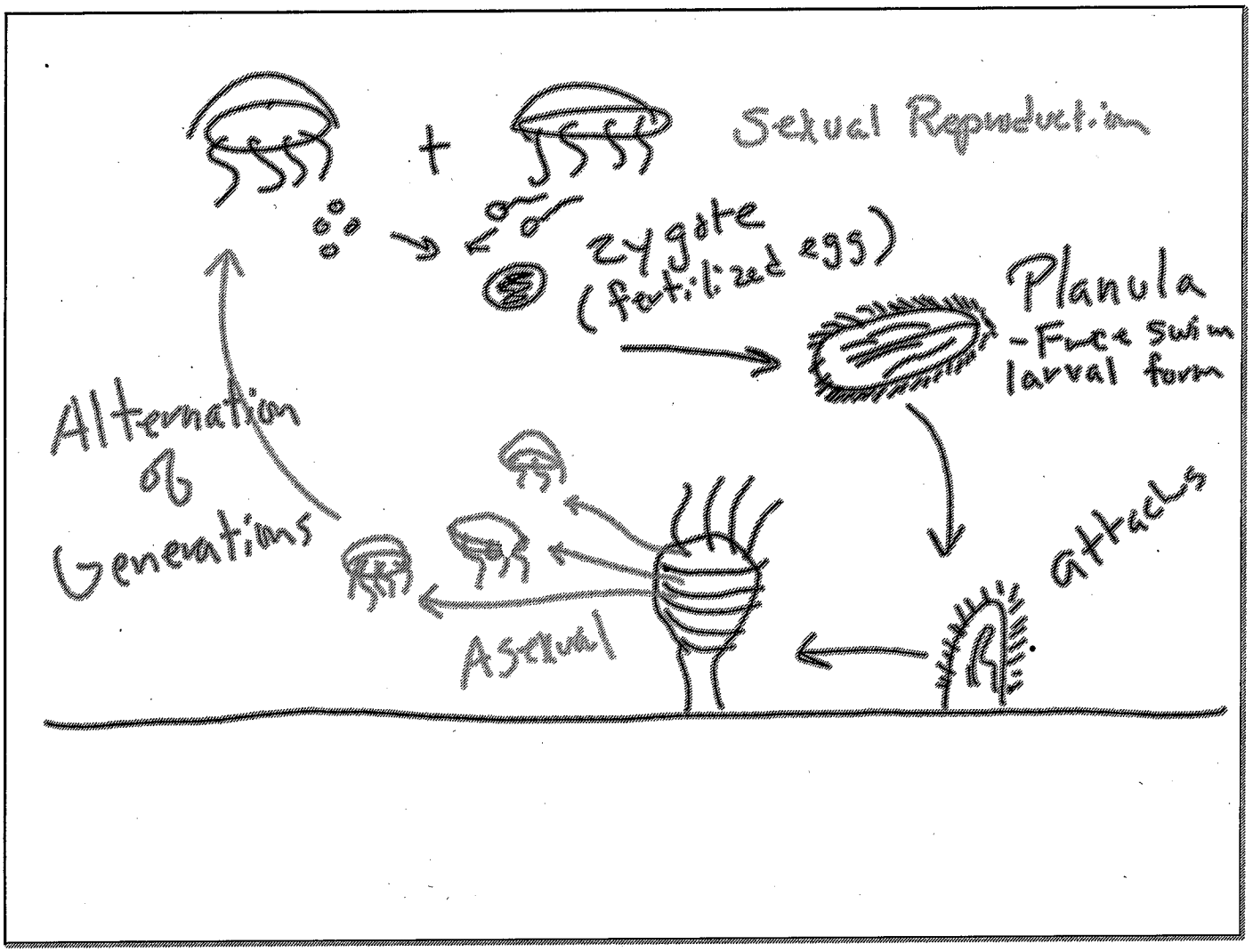
January 22, 2015



Mollusks

Defining Characteristics:

"Soft" body

- Muscular foot
- Complex ganglia that controls breathing, movement, digestion
- Circulatory system to carry material throughout body.
  - most have open c. system
  - Squid & octopi have a closed c. system
  - heart that pumps blood through vessels that form closed loop.
- Have mantle, covers organs, secretes shell

Additional notes:

- Shell protects & keeps from drying out.

Gastropods - snails & slugs
Snails have shell
- move w/ muscular foot
- Radula → rasping tongue for scraping algae from rocks

- Bivalves - Clams, mussels
- Have 2 shells, connected by hinged joint
- filter feeders, take in H_2O, filter, expel H_2O
- open circ. system, fluid not contained in vessels
- carries materials throughout body

Cephalopods - Tentacles (modified muscular foot)
- Closed circ. system w/ heart that pump blood - loop
- Defined head w/ complex eyes & senses

Annelids

- Segmented: having nearly identical repeating body parts called metamerism
- Closed circ. system
- complex nervous system w/ brain
- nerve cord connect brain to ganglia in e. segment
- fresh & salt H_2O & on land

Earthworm

- 100-175 segments
- leave behind castings, make soil richer
- move w/ little hairs called setae

Marine Worms

- Common here - Clamworms
- many bristles called parapodia used for respiration & locomotion
- Some eat small usks others filter feed.
- Polychaetes - tube worms

Leeches

- Some parasites, but not all
- Have 32-34 segments
- Some have anticoagulant
  - Chemical that thins blood to keep it flowing & not clot.

1.) Worms line up head to tail. (i).

2.) Exchange sperm

3.) Slime "tube" forms around Clitellum

4.) Dries & fills w/ fluid

5.) Worms wiggle out of the tube

6.) Tube passes over female pore which deposits eggs into capsule

7.) Then passes over male pore & deposits stored sperm

8.) Slime tube slips off & forms cocoon for fertilized eggs

9.) Bacteria decay outer part of cocoon, releasing baby worms when conditions are favorable.