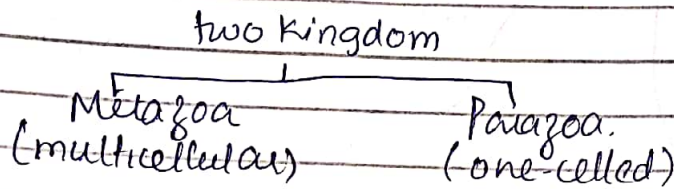


KINGDOM ANIMALIA

→ Include all the animals.

→ Animalia derived from = breath/soul.



→ It consists of animals.

↳ multicellular.

↳ diploid, eukaryotic

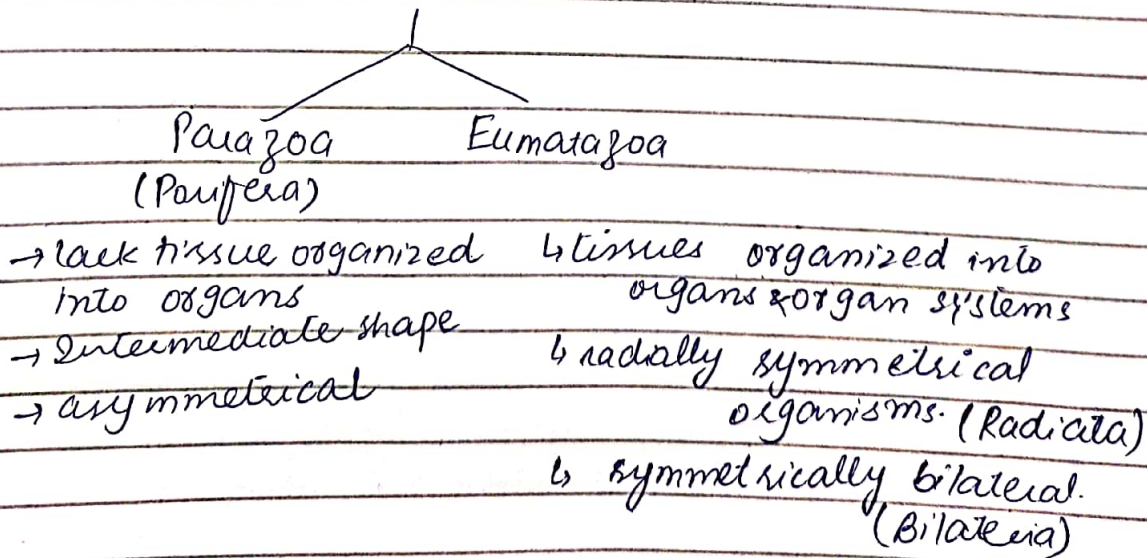
↳ ingestive heterotrophs

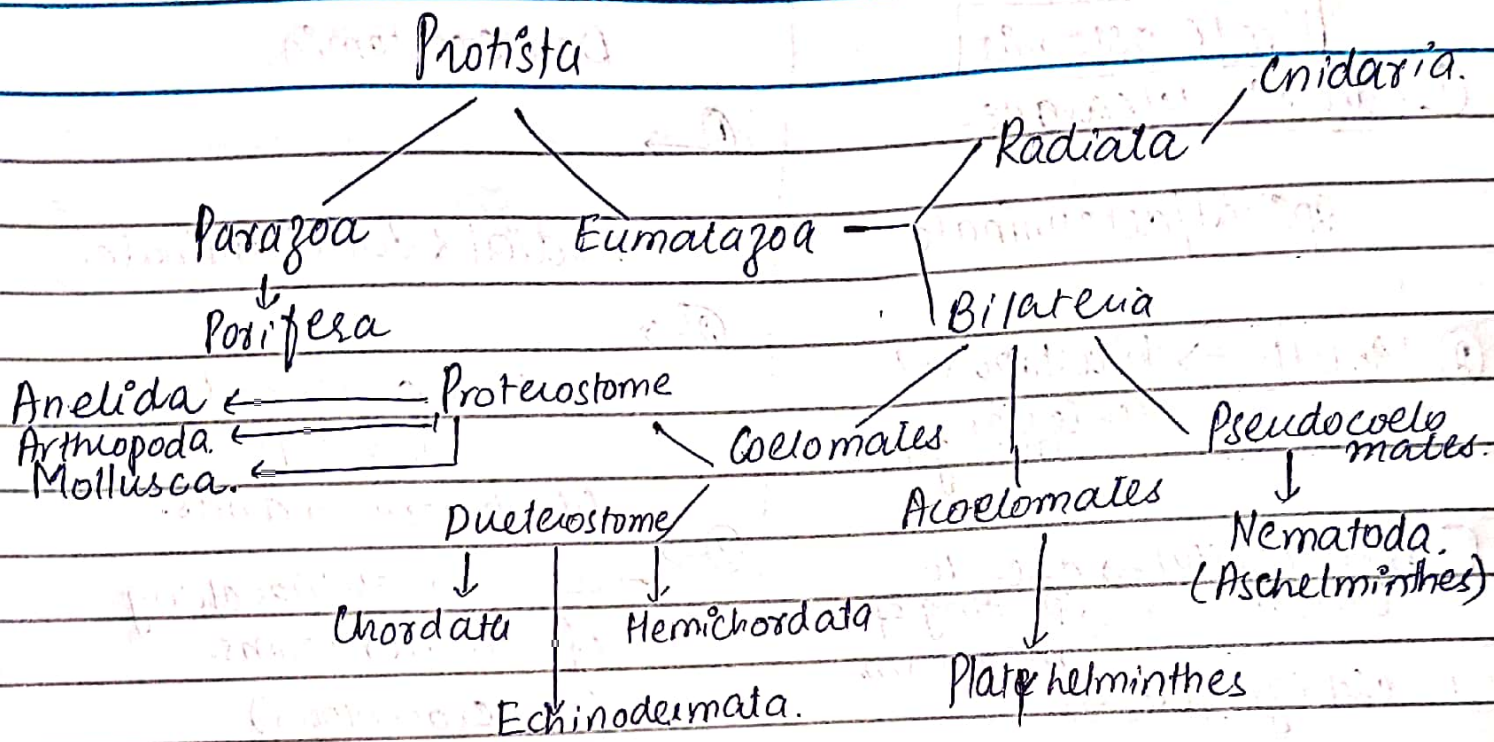
↳ develop from two dissimilar

haploid gametes — large egg
smaller sperm.

→ Animals evolved from protists.

Development of complexity:-





Grade Radiata

- Radial Symmetry
- Diploblastic
- parts of body are arranged around central axis.
- ↓
- such that any plane divides in two equal halves. & that are mirror image.
- eg Cnidaria (Coelenterata)

Grade Bilateria

- Bilateral Symmetry
- triploblastic.
- ① right side approx same as left side.
- ② distinct anterior end.
- can be divided only in one plane.
- eg Platyhelminthes
- = Nematoda.
- Mollusca
- Arthropods.
- Echinodermata
- Hemichordata
- Chordata.

Coelomates

Protostomia

① → division / cleavage.

Spiral / determinate

② Mouth ⇒ blastopore / anterior margin.

③ Body cavity ⇒ due to splitting of mesoderm.
(Schizocoelous)

④ Mesoderm ⇒ cells on anterior lip of blastopore.

⑤ ex
Aschelminthes
Annelida.
Mollusca.
Arthropoda.

Deuterostomia.

① →

Radial & Indeterminate.

② →

Mouth ⇒ anterior to blastopore.

blastopore ⇒ anus.

③ →

⇒ as an outpouching of archenterons.
(enterocoelous)

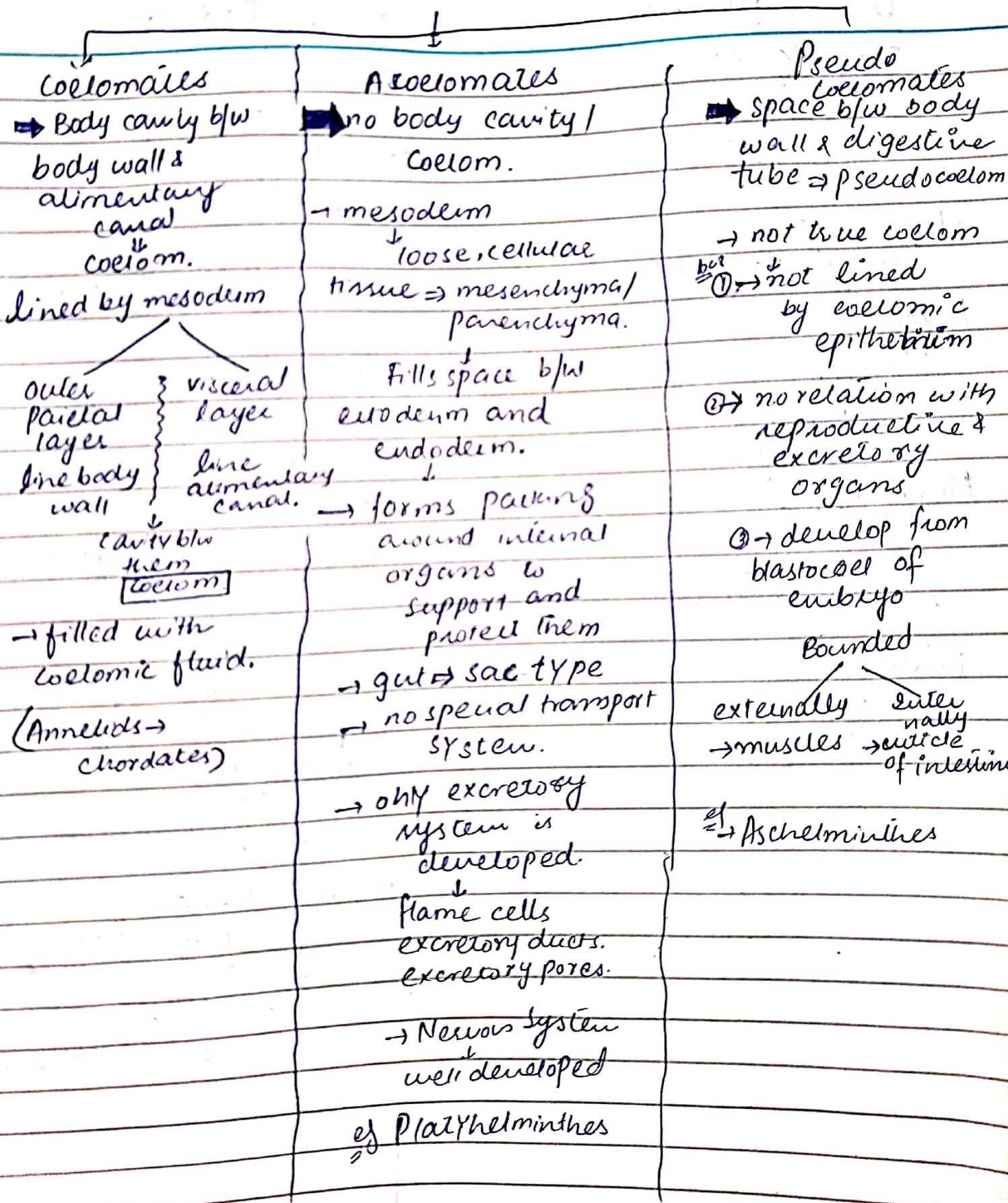
④ →

⇒ form wall of developing gut.

⑤ →

ex
Echinodermata
Chordata
Hemichordata.

Bilateria



Triploblastic

Division Bilateria.

Three layers

ectoderm | mesoderm | endoderm.

→ high degree of specialization.

Ectoderm

↳ Integumentary system & Nervous system.

Mesoderm

↳ muscular, skeletal & reproductive

Ectoderm:-

↳ digestive system

Diploblastic

Division Radiata

Two layers of cells.

ectoderm } endoderm

→ jelly-like mesenchyma in between
→ no cellular.

→ lesser degree of specialization

→ don't form special organs.

→ no special transport system.

→ diffusion → transport of substances.

→ no central system

→ only one cavity

↳ gastrovascular

only mouth → entry & removal of water & other substances.
↳ sac-like digestive system