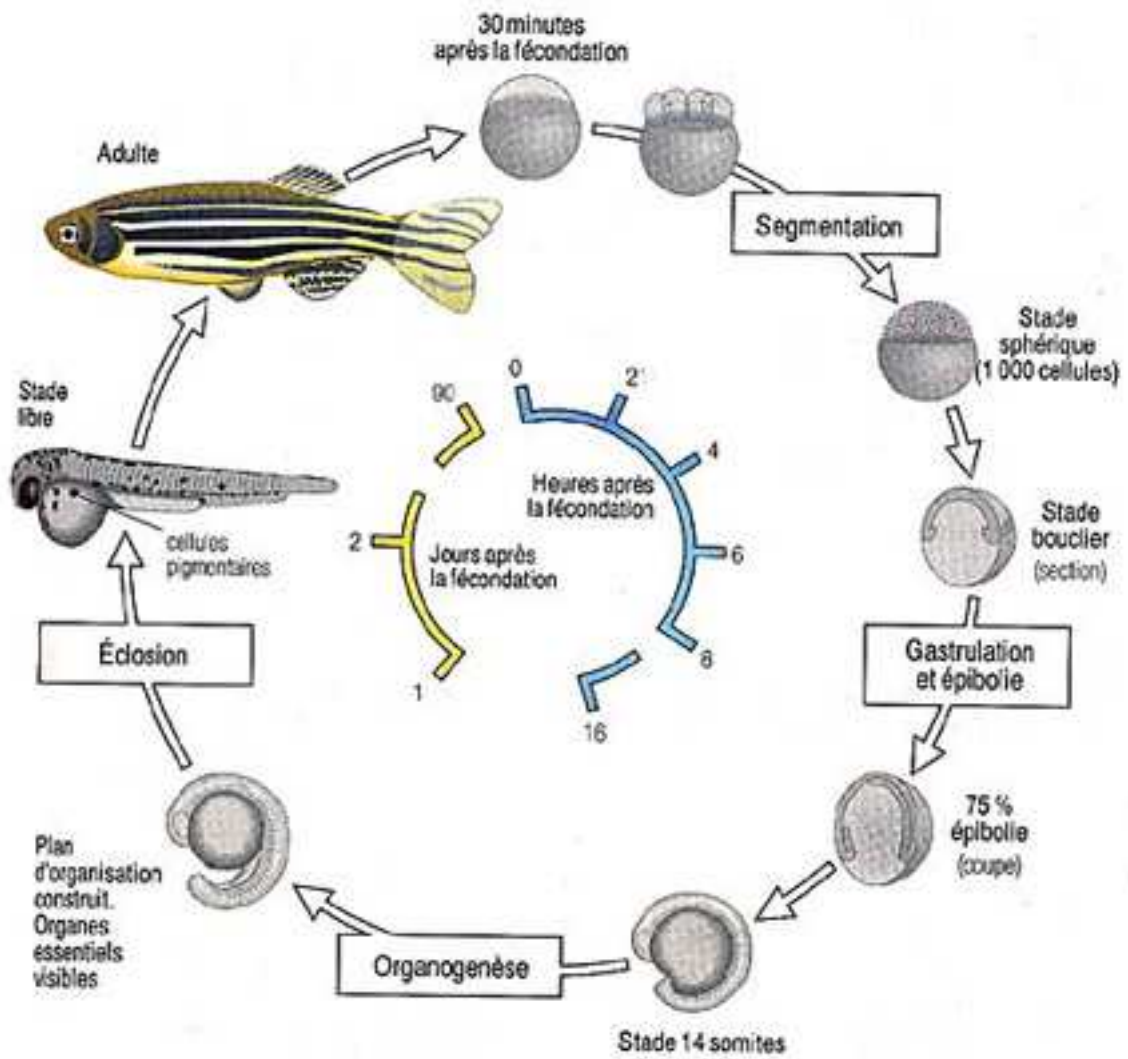
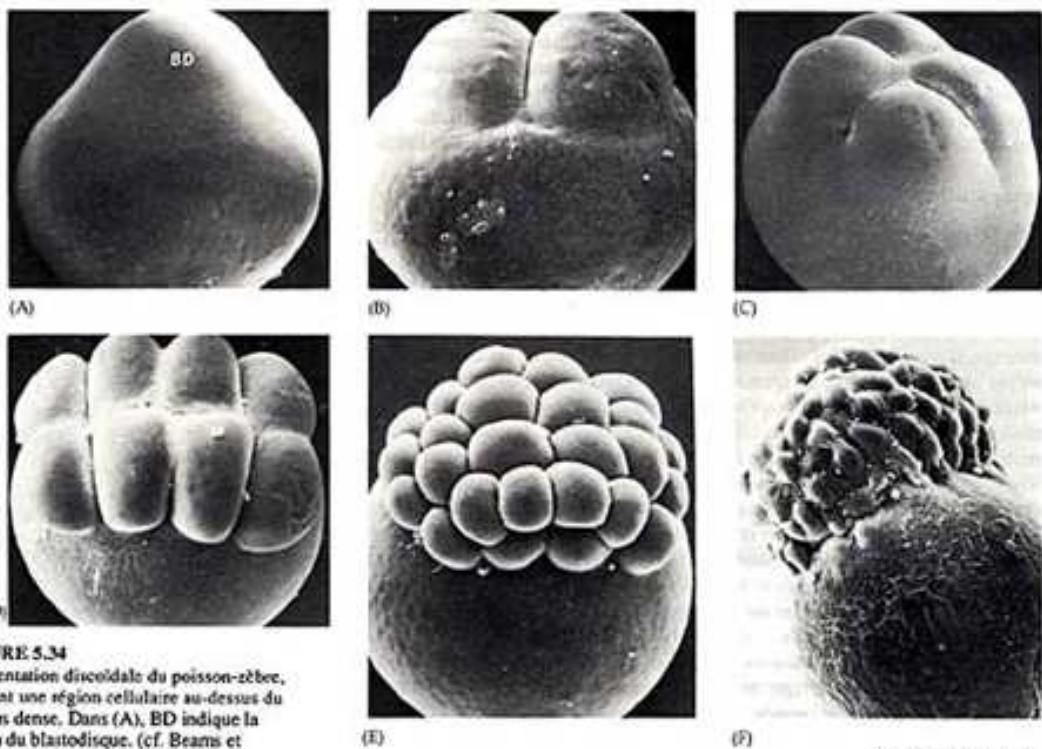




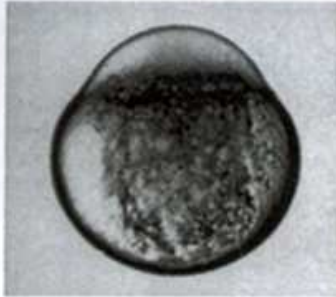
# LES POISSONS



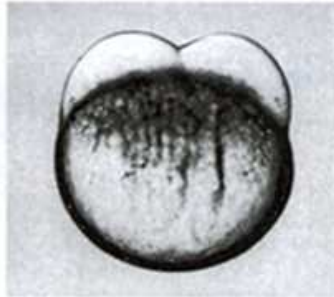


**FIGURE 5.34**  
 Segmentation discoidale du poisson-zèbre, formant une région cellulaire au-dessus du vitellus dense. Dans (A), BD indique la région du blastodisque. (cf. Beams et Kessel, 1976, amabilité des auteurs.)

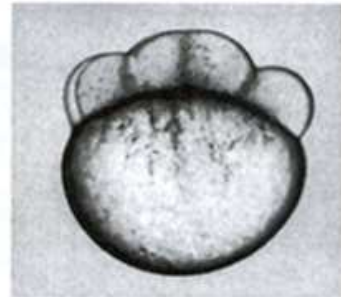
Microphotographies d'embryons de *Danio rerio* (x 50)



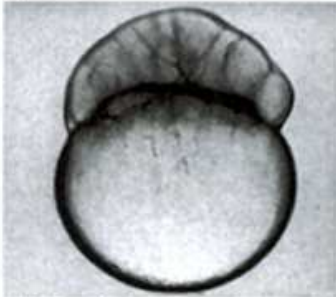
a) 1 cellule



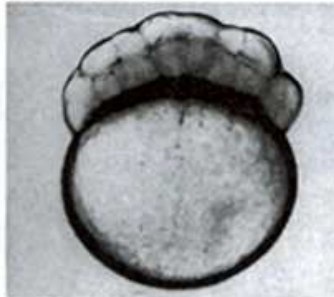
b) 2 cellules



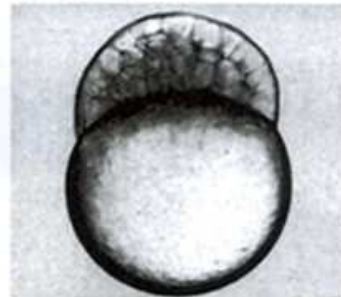
c) 8 cellules



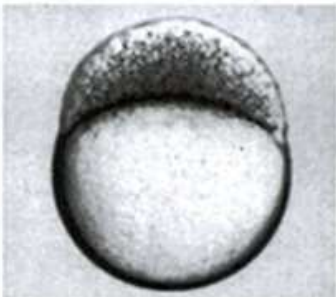
d) 32 cellules



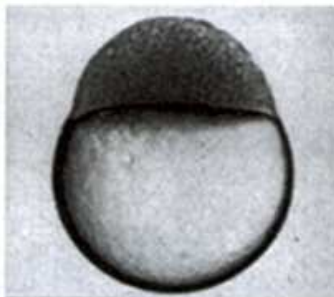
e) 64 cellules



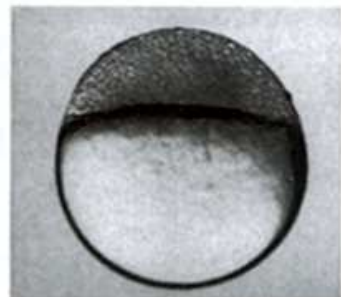
f) 128 cellules



g) 1000 cellules



h) Blastula haute



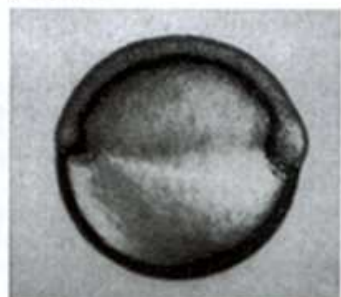
i) Sphère



j) Dôme



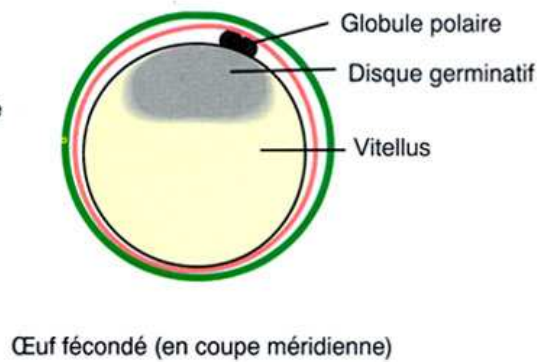
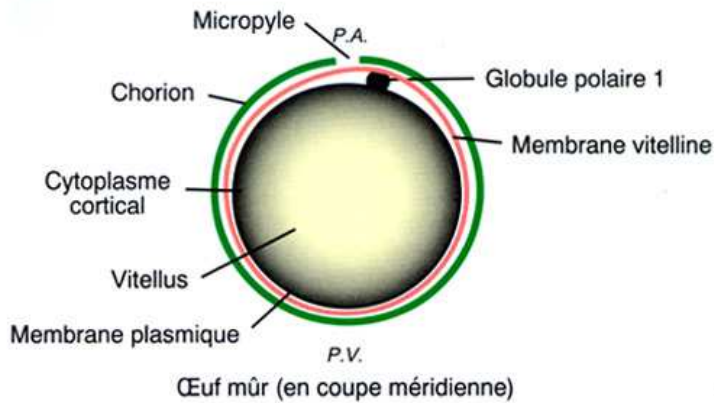
k) 50% épibolie



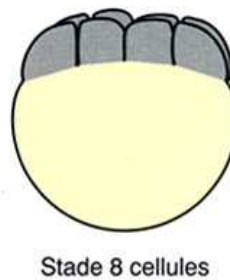
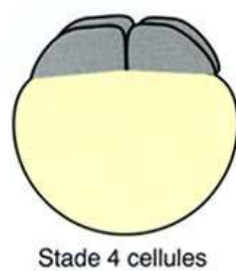
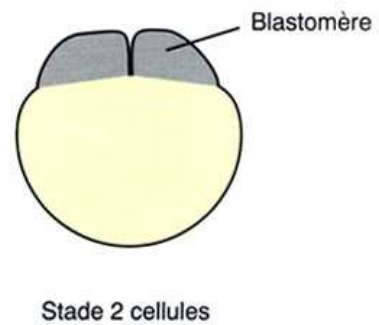
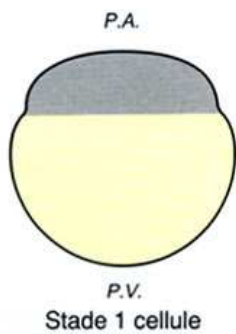
l) Écusson (de profil)

**Premières étapes de la segmentation**

a) L'œuf insegmenté



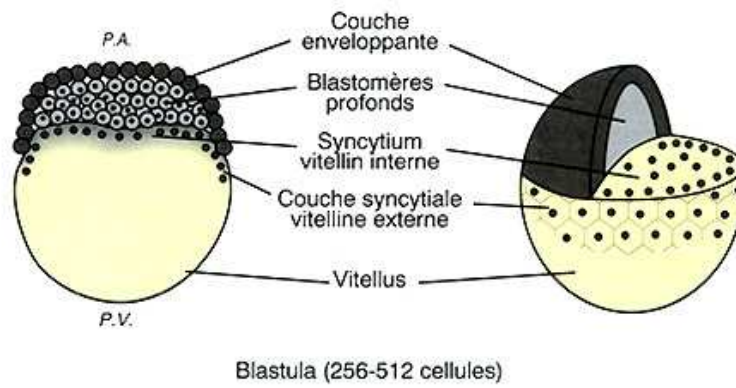
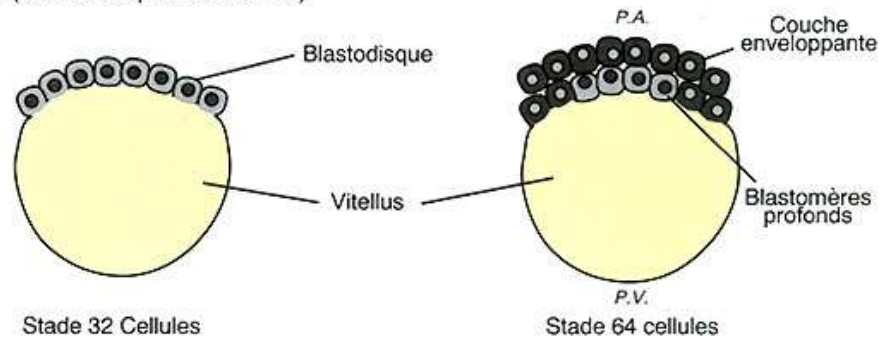
b) La segmentation : premiers stades (vues latérales externes)



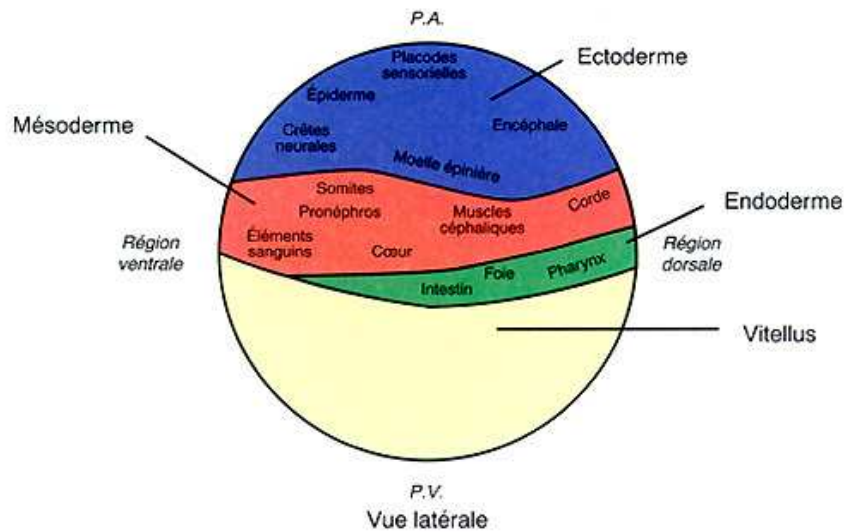


Les étapes finales de la segmentation et la carte des territoires présomptifs

a) La segmentation (vues en coupes méridiennes)



b) Carte des territoires présomptifs au stade 50% d'épibolie

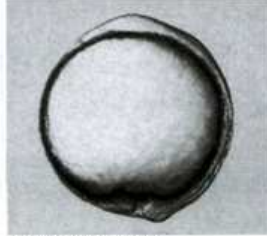


Microphotographies de la formation du bourgeon caudal et de la formation de la larve (x 50)

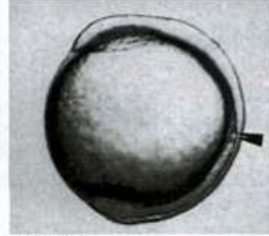
a) Formation du jeune bourgeon caudal et somitogénèse



80% épibolie



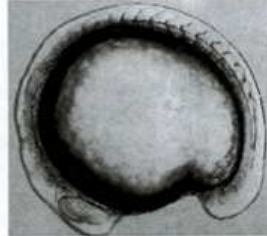
Bourgeon caudal



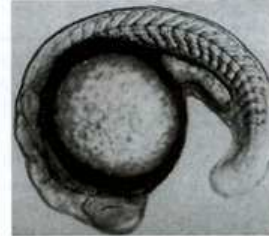
1 somite



5 somites

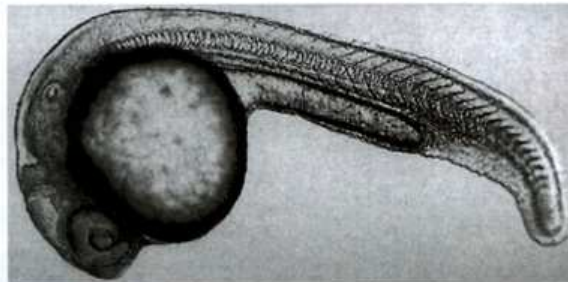


15 somites



20 somites

b) Redressement du bourgeon caudal



Bourgeon caudal âgé



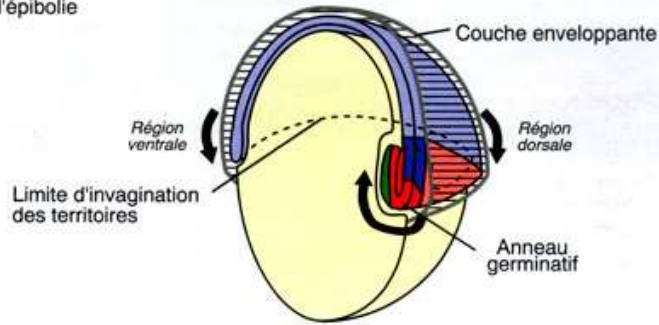
c) Formation de la larve nageuse



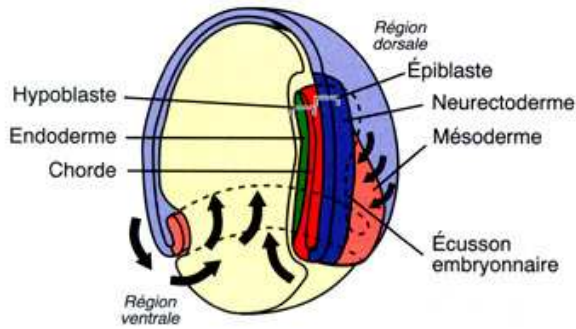
(d'après Boulekbache, 1998)

**La gastrulation**

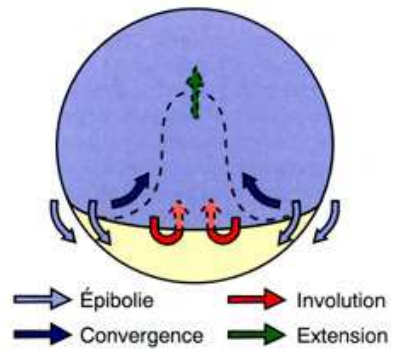
a) Embryon à 50% d'épibolie



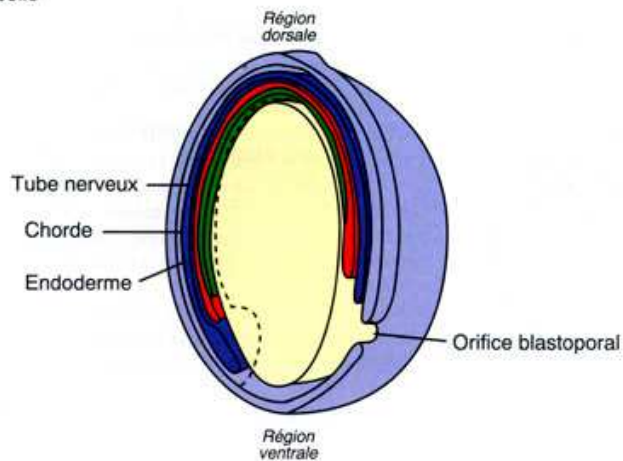
b) Embryon à 75% d'épibolie (sans la couche enveloppante)



c) Embryon à 75% d'épibolie : mouvements des territoires en vue externe dorsale

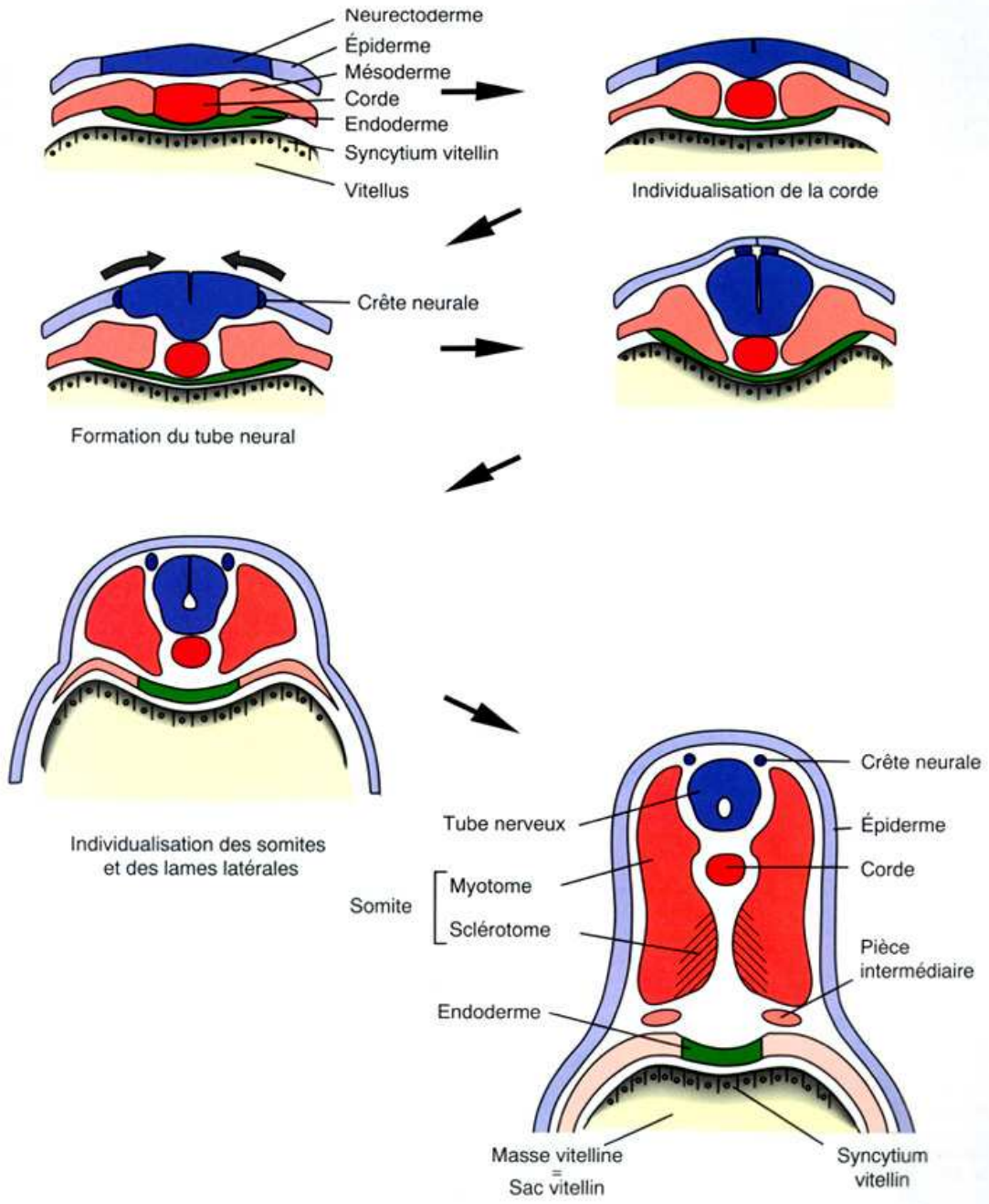


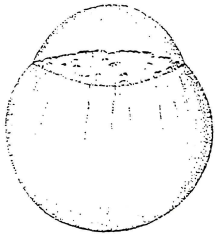
d) Embryon à 100% d'épibolie



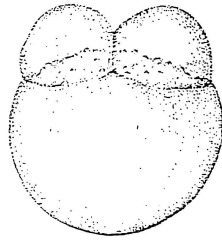


**La neurulation (coupes transversales troncales)**

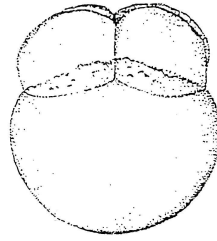




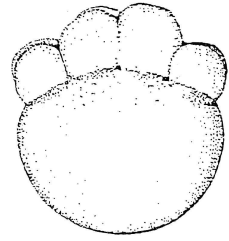
1-cell  
0.2 h



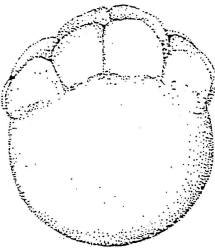
2-cell  
0.75 h



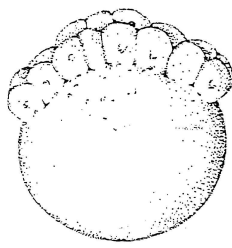
4-cell  
1 h



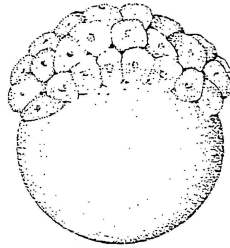
8-cell  
1.25 h



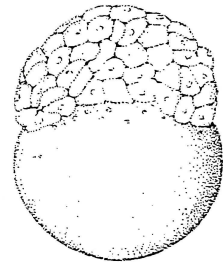
16-cell  
1.5 h



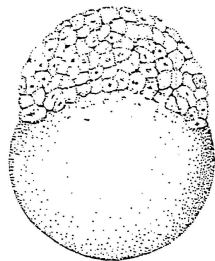
32-cell  
1.75 h



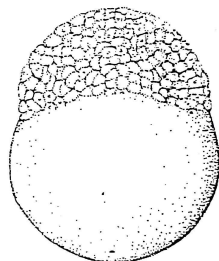
64-cell  
2 h



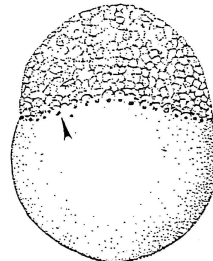
128-cell  
2.25 h



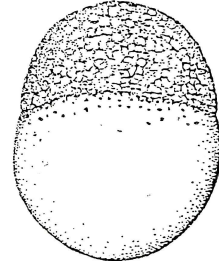
256-cell  
2.5 h



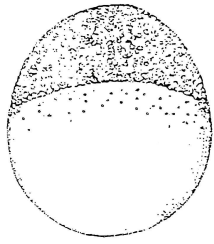
512-cell  
2.75 h



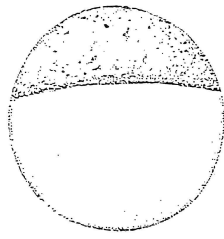
1k-cell  
3 h



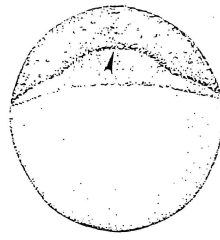
high  
3.3 h



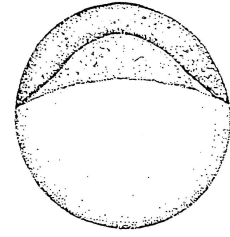
**oblong**  
3.7 h



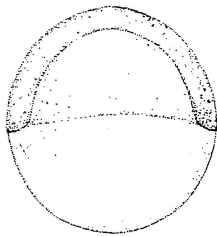
**sphere**  
4 h



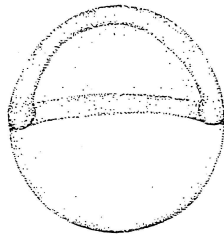
**dome**  
4.3 h



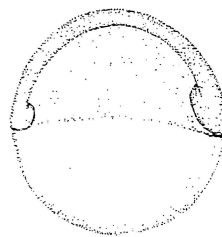
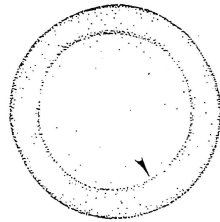
**30%-epiboly**  
4.7 h



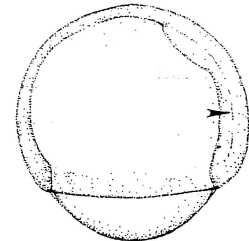
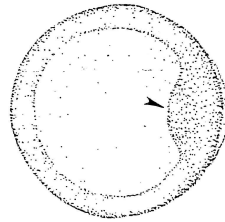
**50%-epiboly**  
5.3 h



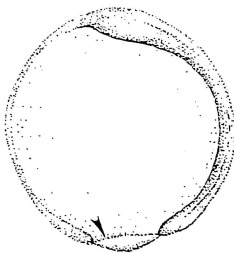
**germ ring**  
5.7 h



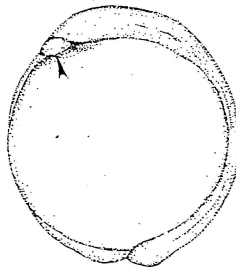
**shield**  
6 h



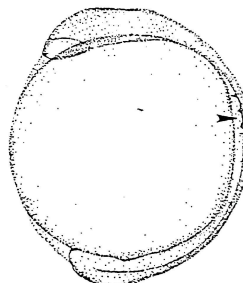
**75%-epiboly**  
8 h



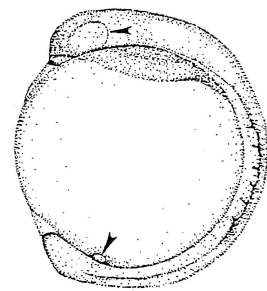
**90%-epiboly**  
9 h



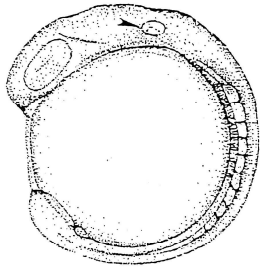
**bud**  
10 h



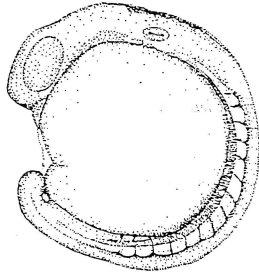
**3-somite**  
11 h



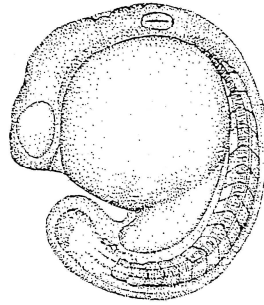
**6-somite**  
12 h



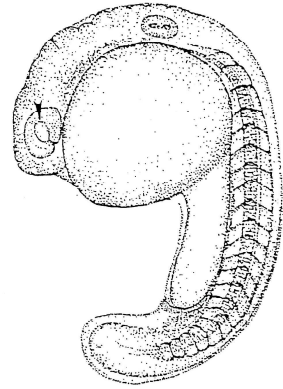
10-somite  
14 h



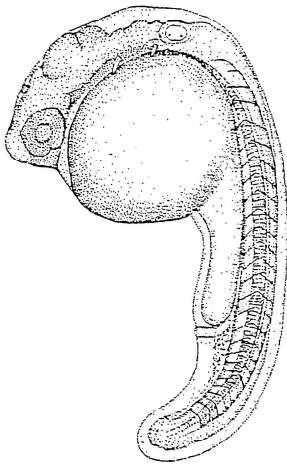
14-somite  
16 h



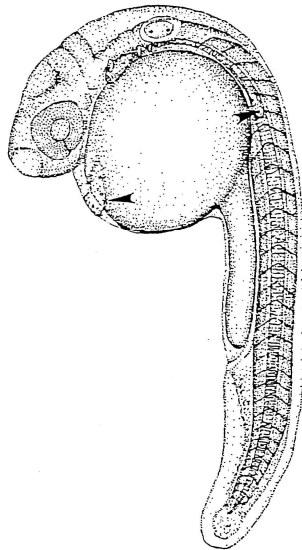
18-somite  
18 h



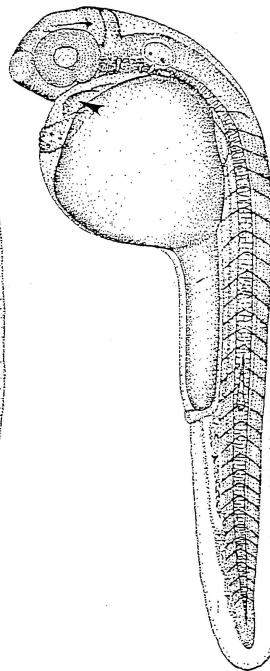
21-somite  
19.5 h



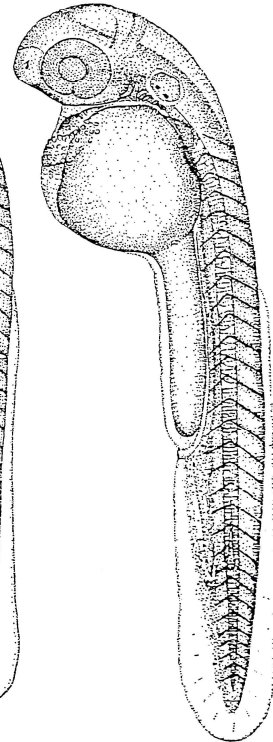
26-somite  
22 h



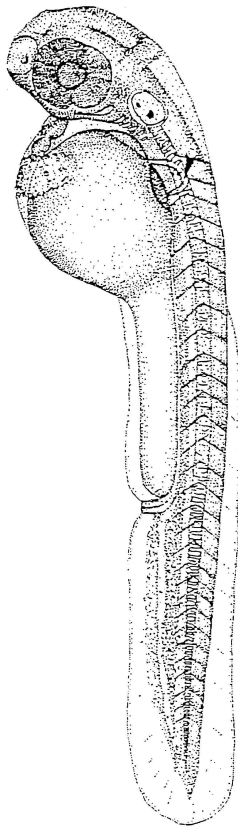
prim-6  
25 h



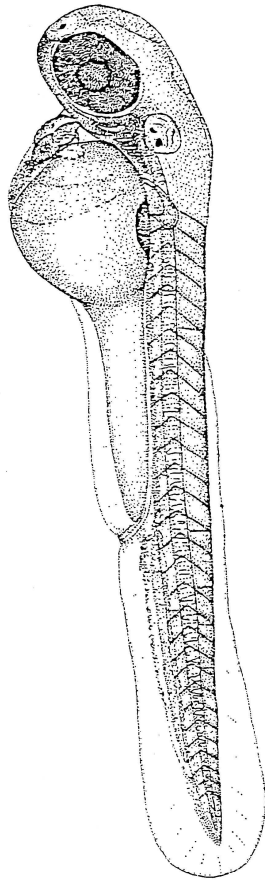
prim-16  
31 h



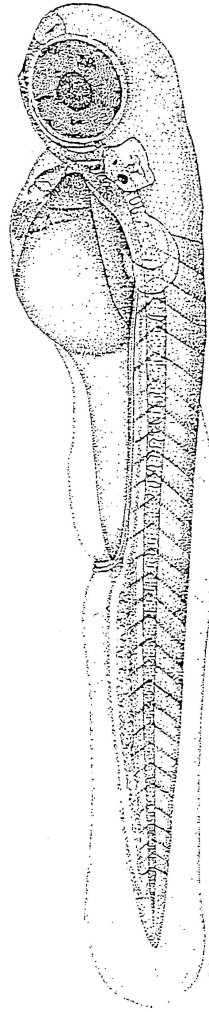
prim-22  
35 h



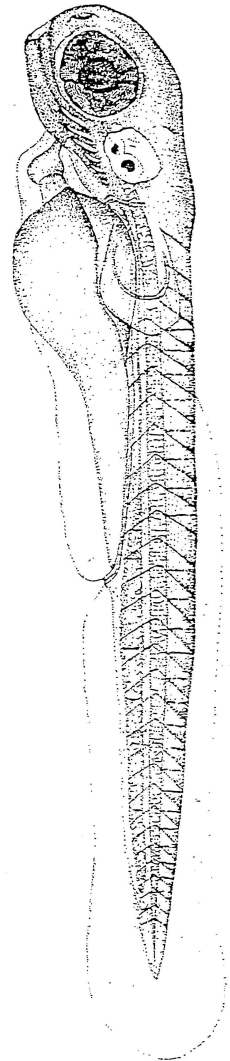
high pec  
42 h



long pec  
48 h



pec fin  
60 h

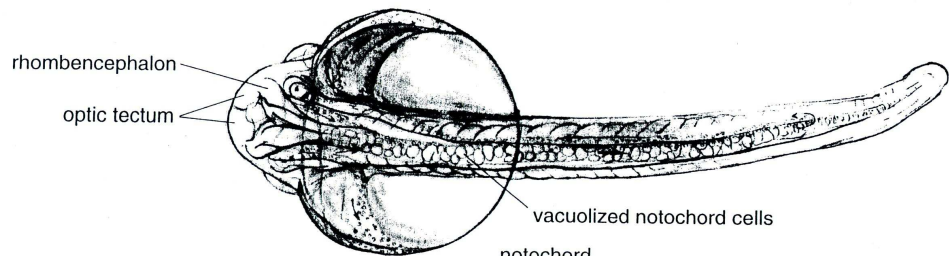


protruding  
mouth  
72 h

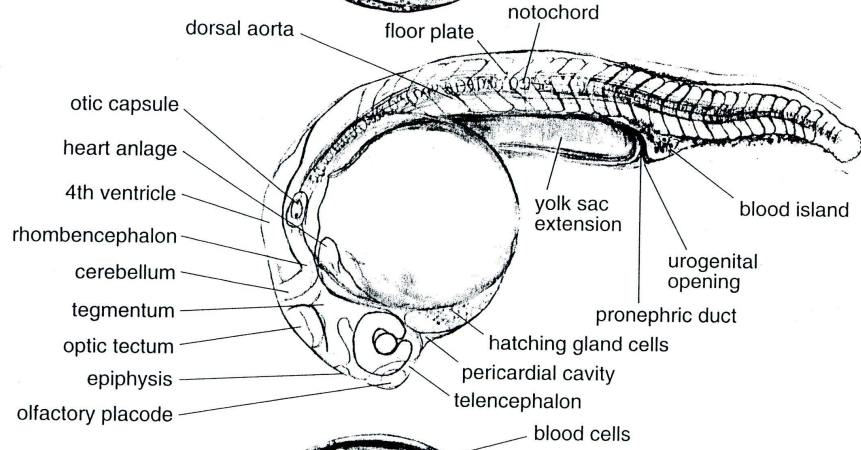


24 h

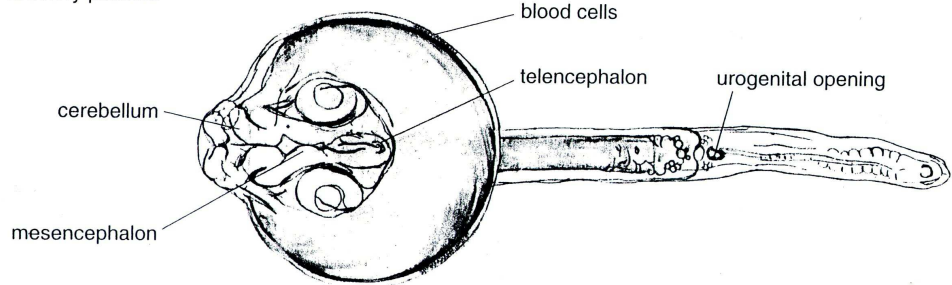
dorsal



lateral

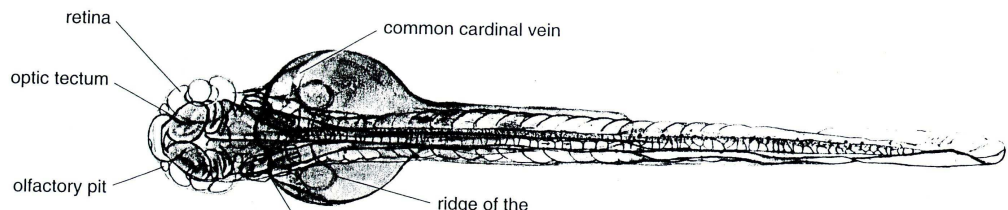


ventral

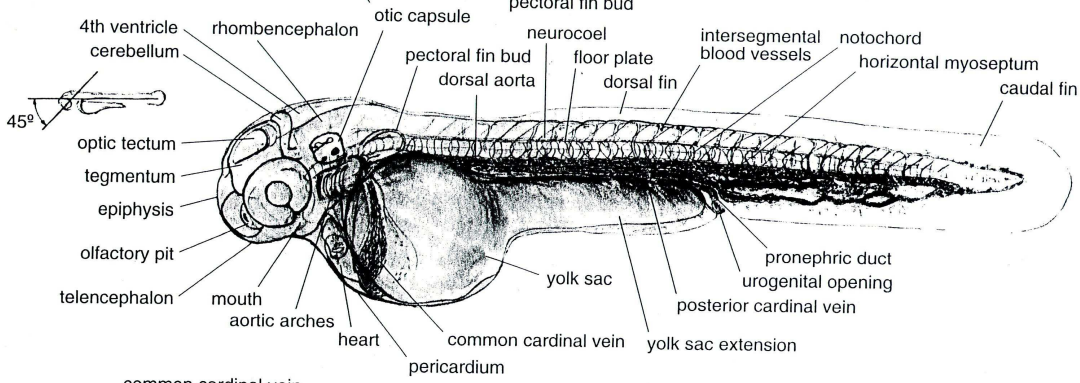


48 h

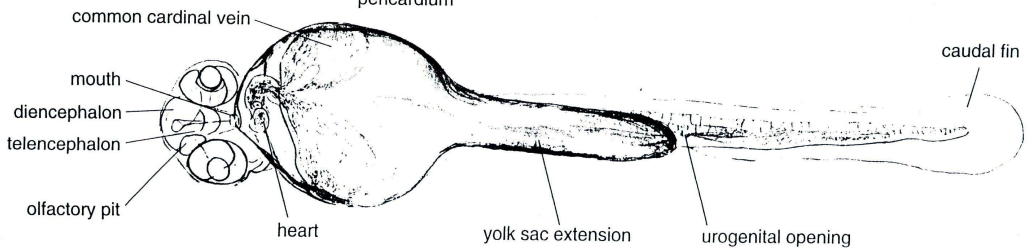
dorsal



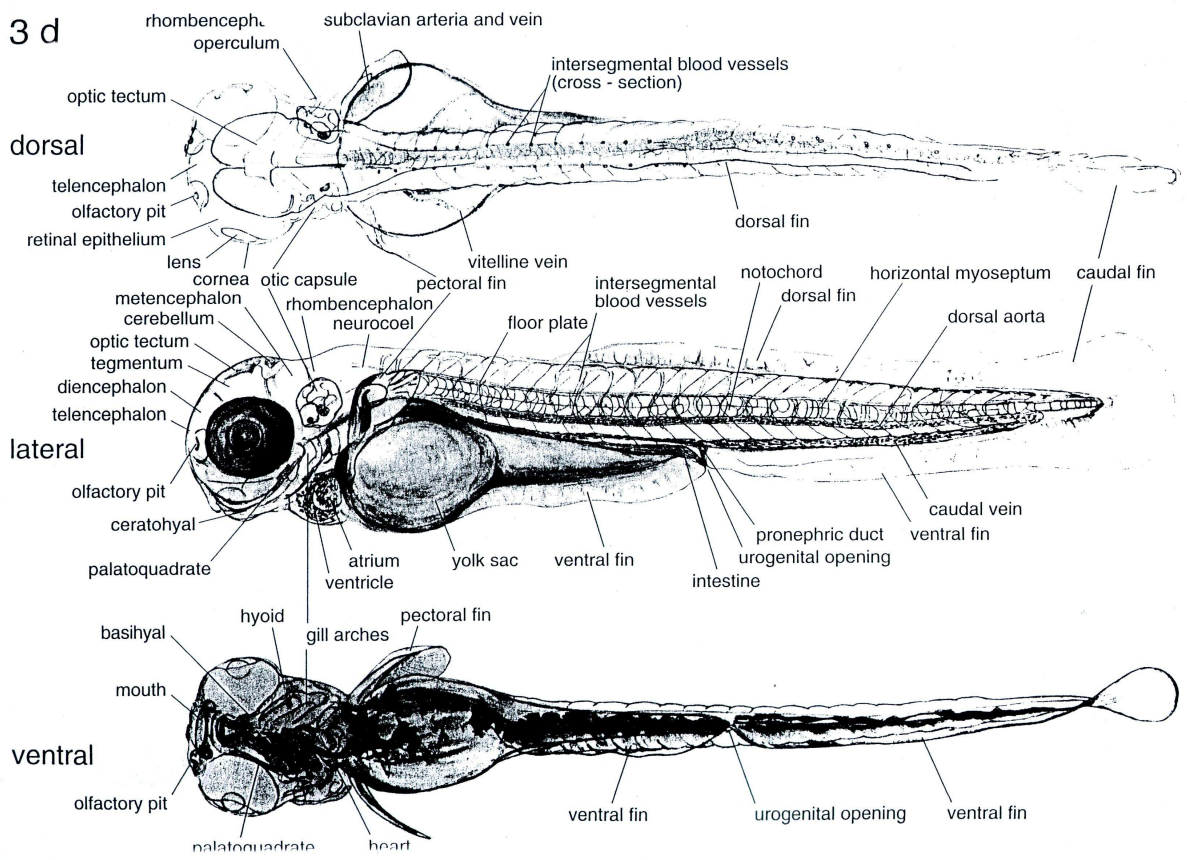
lateral



ventral



3 d



5 d

