

NOTE: In this drawing we will focus on just the 3-layer germ disc. The disc is still inside the chorion, but we won't see the chorion in this drawing. We will see it again in drawing 28.

TOP VIEW OF 3-LAYER DISC:



(1) Notochord and primitive streak
Notochord secretes SHH protein.



(2) Neural groove forms



(3) Neural tube begins

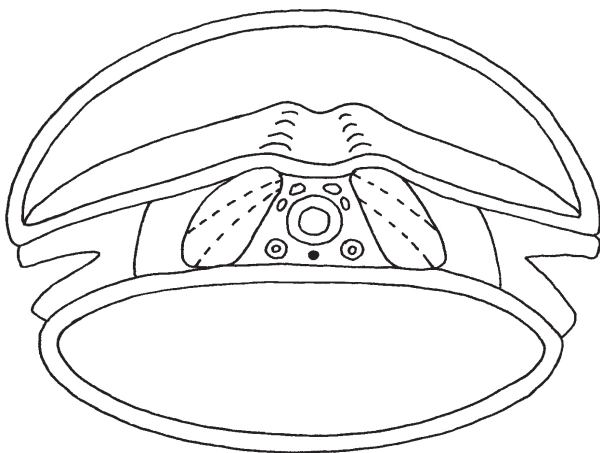


(4) Neural tube will become brain and spinal cord. Neural crests will be peripheral nervous system and more.

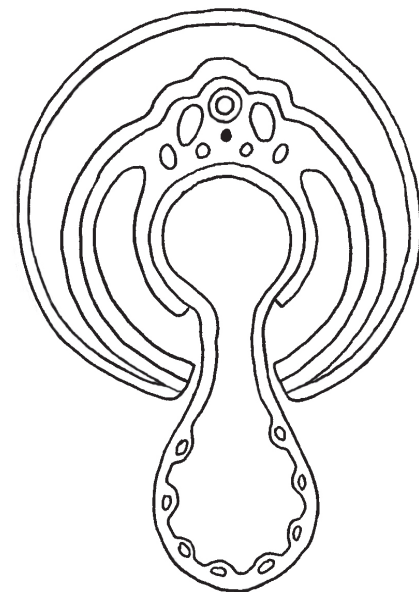


(5) Mesoderm begins to differentiate and heart tubes appear

Here we see the 3-layer disc with amnion and yolk sac.



(6) "Somites" appear. (Future spine and associated muscles)
Mesoderm continues to differentiate and the ends split.



(7) The embryo curls, forming the gut tube and the amniotic sac. Blood islands appear in the yolk sac and will become complete little sections of vessel, with red blood cells already inside.