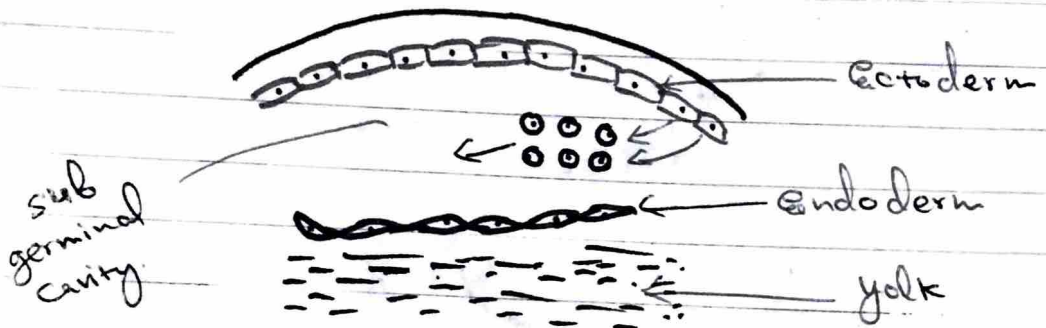


## GASTRULATION:

Now, Some cells from the lower part of the area pellucida come down and form the surface of subgerminal cavity. This surface layer is known as **Endoderm**.

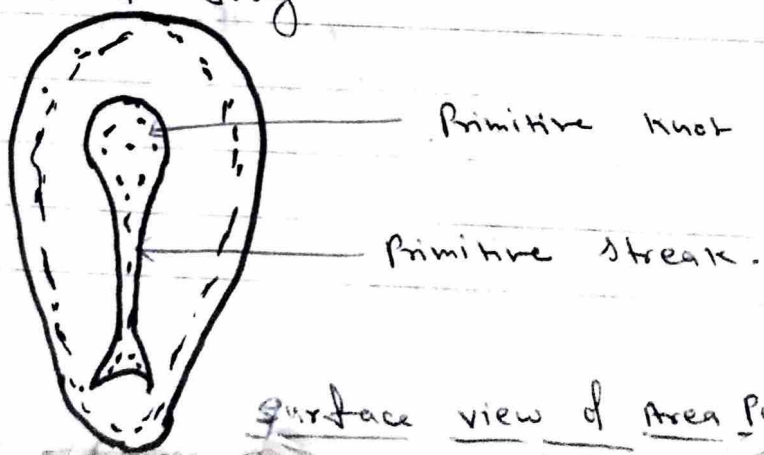
Thus, Embryo is distinct into two layers - the upper ectoderm and lower endoderm.



There is no invagination and archenteron formation like frog.

Some basal cells of the ectoderm collect in the centre of blastoderm and collectively form Primitive streak. Its apical swollen portion is known as Primitive knot.

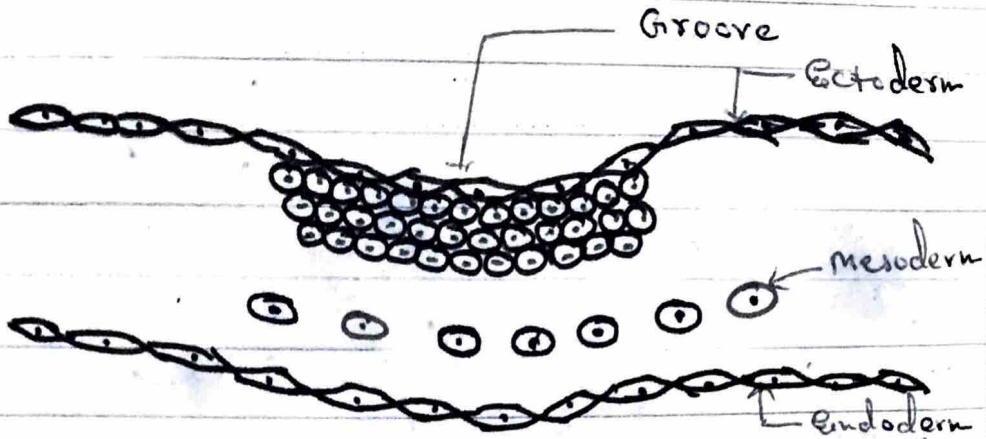
Primitive streak & Primitive knot may be compared with the lateral lip of blastopore of frog.



Surface view of Area Pell

Large amount of cells come to lie in the sub-germinal cavity from the primitive streak which are the future mesoderm.

Due to the lacking of cells, a groove is formed on the primitive streak.



### V.S. OF BLASTODERM THROUGH PRIMITIVE STREAK

In this way, Ectoderm, mesoderm & endoderm are formed in the chick.

## Frog

## Chick

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| 1) Holoblastic cleavage              | 1) Meroblastic cleavage           |
| 2) Blastula similar                  | "                                 |
| 3) Invagination + nt                 | 3) Invagination - nt.             |
| 4) Archenteron + nt                  | 4) Archenteron - nt               |
| 5) Ectoderm not attached to mesoderm | 5) Ectoderm attached to mesoderm. |
| 6) Morulla stage + nt                | 6) Morulla stage - nt.            |
| 7) Coelom + nt                       | 7) Coelom - nt                    |
| 8) Primitive streak                  | Primitive knob of chick           |
- may be compared with the upper lip of blastopore of frog.