



Live Recap,
Embryo


LIVE DISCORD 06/02

BY AKEMI, SALEGOSSE & LONG-MIMI

ECUE 8



Au PROGRAMME :

- INTRO À L'EMBRYO' (S0)
 - SEMAINE 1
 - SEMAINE 2
 - SEMAINE 3
 - SEMAINE 4 & DÉLIMITATION
 - FAQ
- 

INTRO À L'EMBRYO

2E SEMAINE DE DVP → EMBRYON (DED)

(AVANT ON PARLE D'OEUF)



MORPHOGENÈSE TERMINÉE → FOETUS

2 GRANDES PÉRIODES

PÉRIODE EMBRYONNAIRE (1E ET 2E MOIS)

--> EMBRYOGENÈSE, MORPHOGENÈSE, DÉBUT ORGANO

PÉRIODE FOETALE (3E AU 9E MOIS)

--> ORGANOGENÈSE ET CROISSANCE

3 GRANDS ÉVÈNEMENTS

EMBRYOGENÈSE

- FÉCONDATION (J0) → FIN GASTRULATION (FIN S3)
- FORMATION DES 3 FEUILLETS PRIMITIFS (ECTO/MÉSO/ENTOBLASTE)
- PHÉNOMÈNES DE DIFFÉRENCIATIONS ET MIGRATIONS CLLR

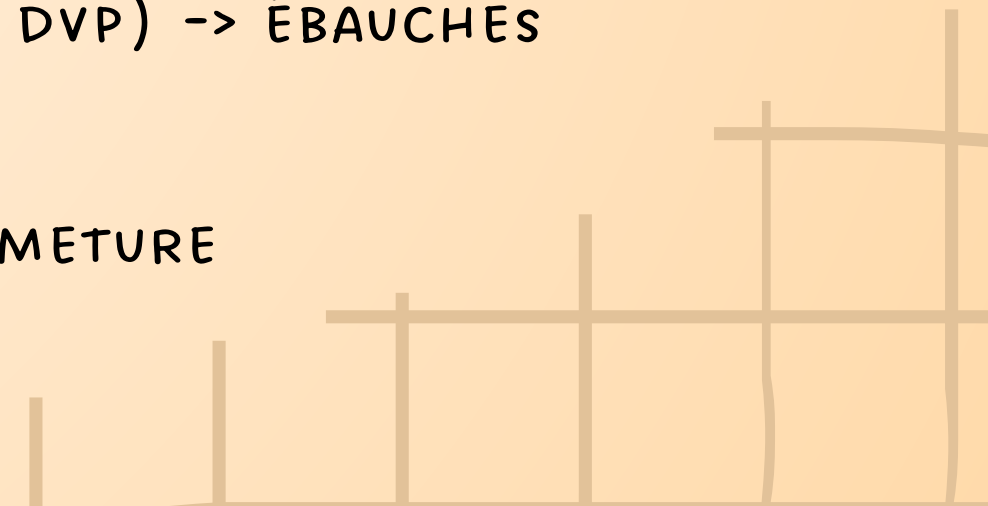
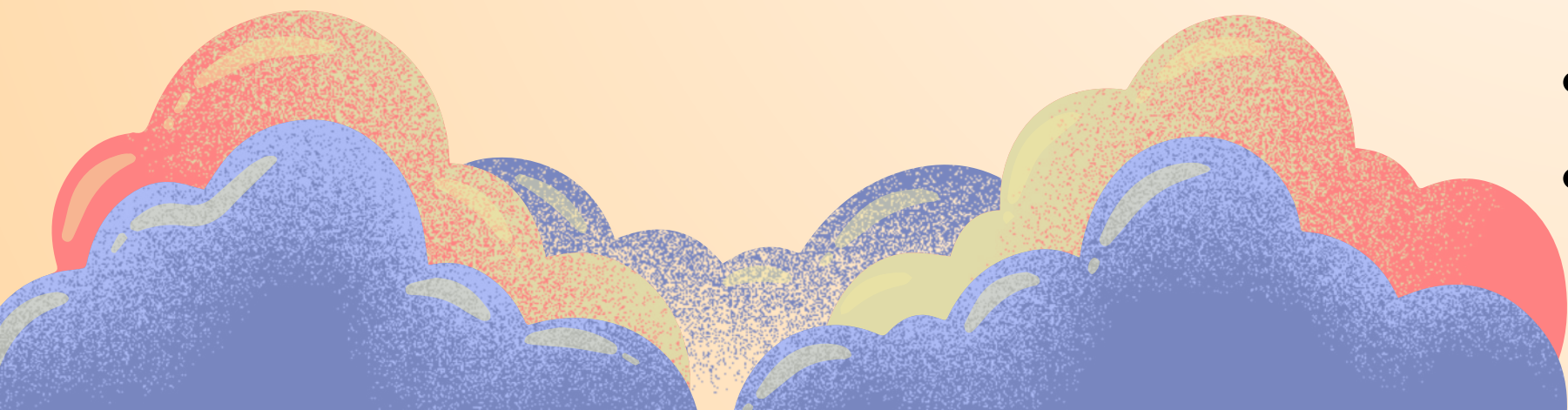
• DET

ORGANO I ET II

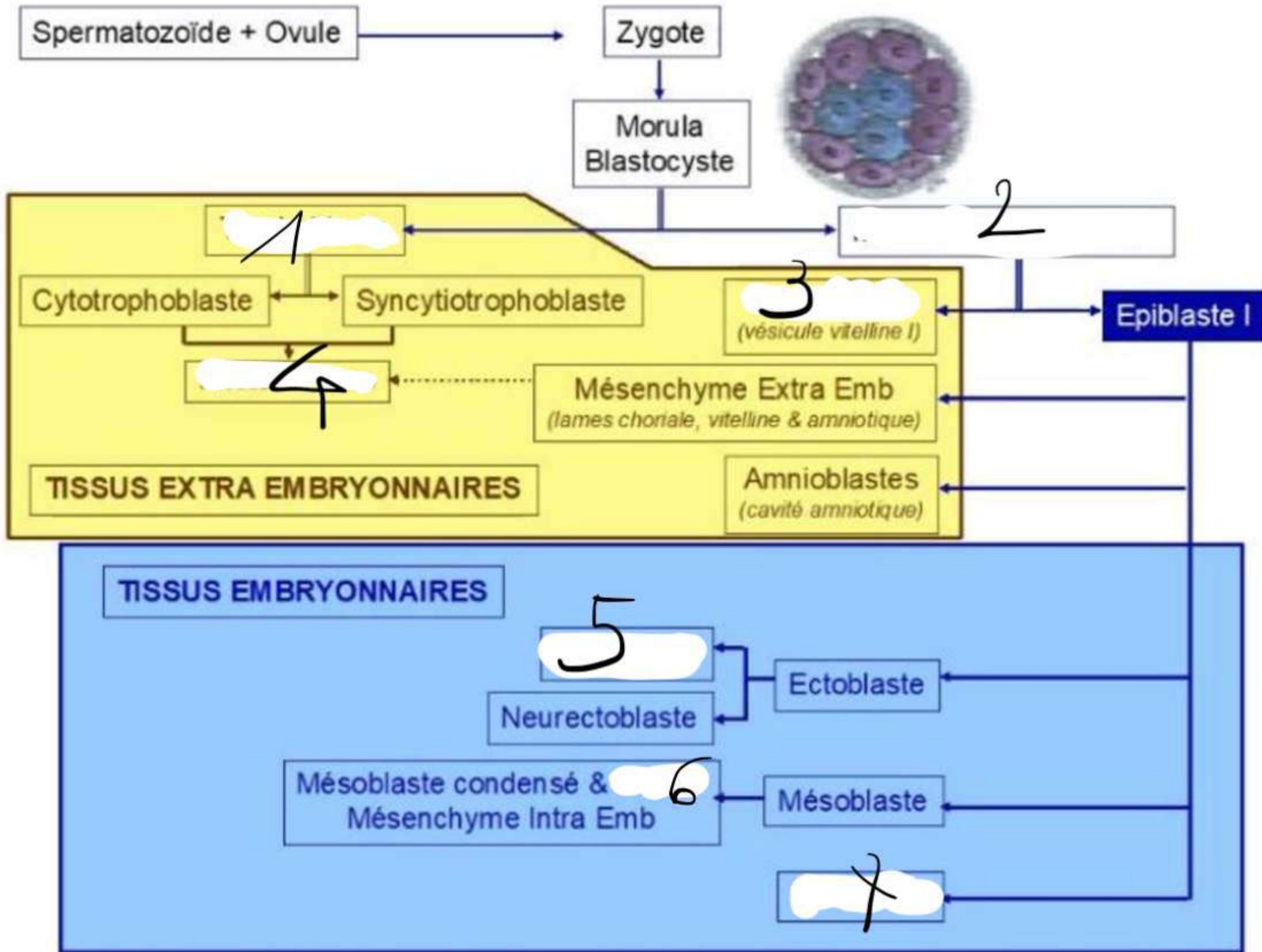
- I : ÉBAUCHES À PARTIR DES 3 FEUILLETS
- II : REMODELAGE ET MATURATION
- CONTRIBUE À LA DÉLIMITATION (NEURULATION ET MÉTAMÉRISATION)

MORPHO I ET II

- I : DÉLIMITATION (4E SEMAINE DE DVP) → ÉBAUCHES
- II : MORPHO HUMAINE (2E MOIS)
- PHÉNOMÈNES DE PLICATURE / FERMETURE

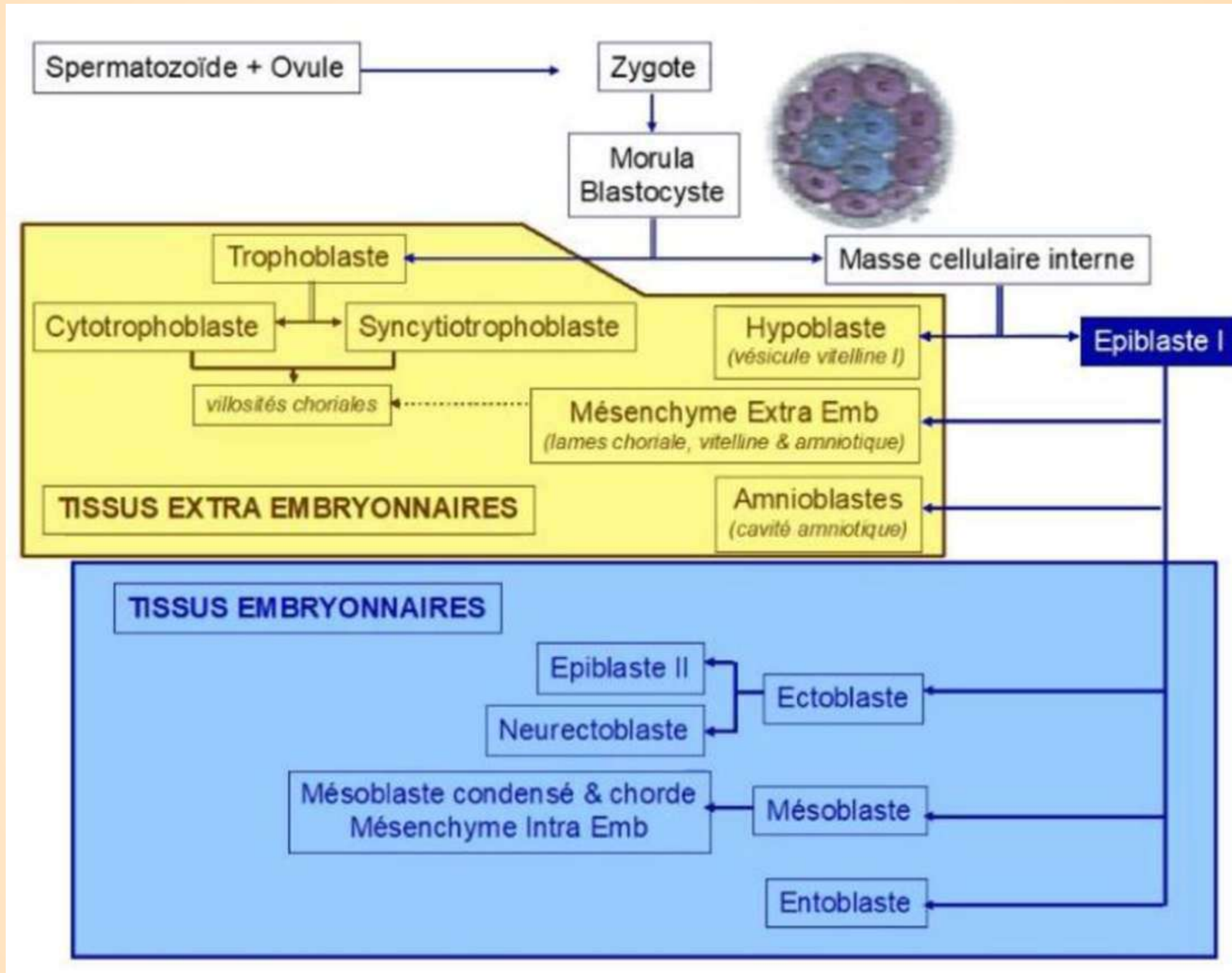


QWIZ SCHEMA SO

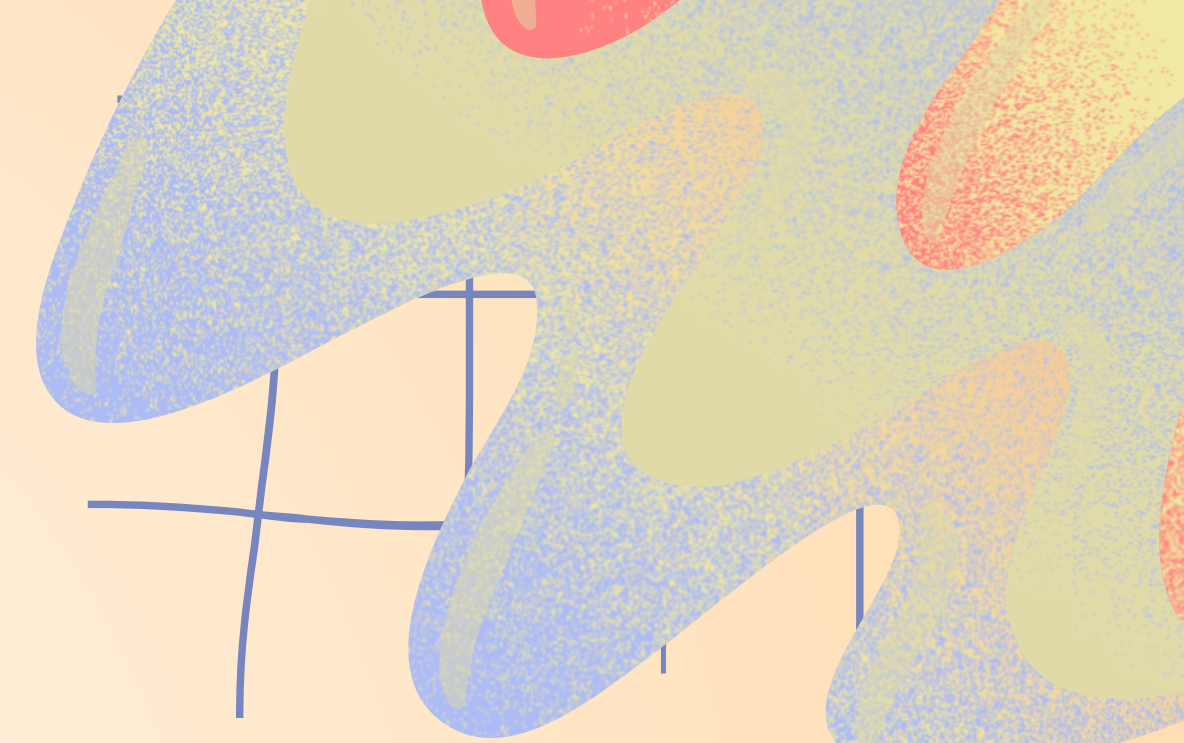


QUIZ SCHEMA SO

CORRECTION



SEMAINE 1



FÉCONDATION -> SEGMENTATION / MIGRATION -> APPPOSITION (1E ÉTAPE NIDATION S2)

ZYGOTE -> BLASTOCYSTE LIBRE / OEUF

FÉCONDATION = OVULE + SPZ -> FIN MÉIOSE II (OVOCYTE BLOQUÉ EN MÉTAPHASE II) -> MITOSE -> 2 PREMIERS BLASTOMÈRES

ON NE PARLE PLUS D'OVOCYTE APRÈS LA FÉCONDATION

LA SEGMENTATION (SÉRIE DE MITOSES SUCCESSIVES)

PRÉCOMPACTION

- 16 BLASTOMÈRES
- TOTIPOTENTES -> ORGANISME ENTIER
- CELLULES SPHÉRIQUES JUXTPOSÉES NON POLARISÉES

COMPACTION / MORULA : J4 ENTRÉE CAVITÉ UTÉRINE

- 64 BLASTOMÈRES
- PLURIPOTENTE -> ENSEMBLE DES CLL DÉRIVÉS DES 3 FEUILLETS
- INDIVIDUALISATION -> CENTRE = MCI / PÉRIPH = TB

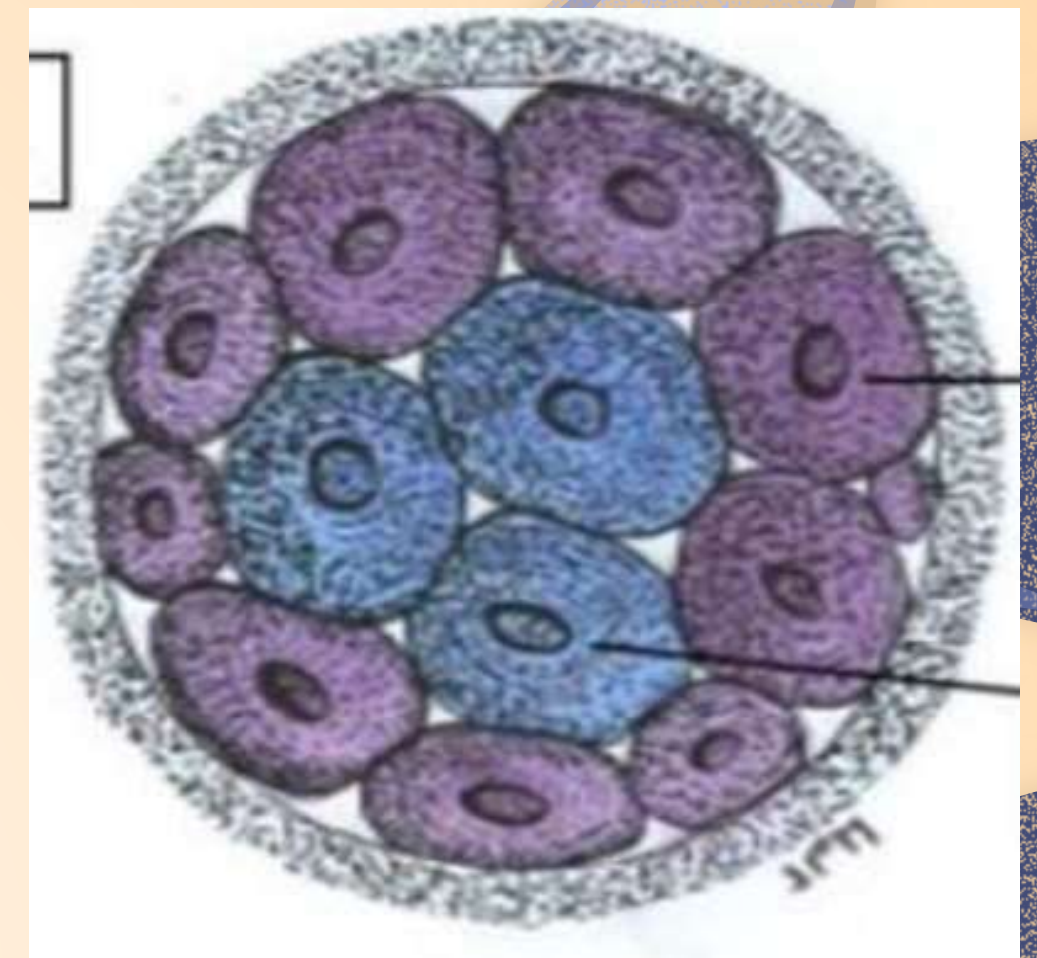
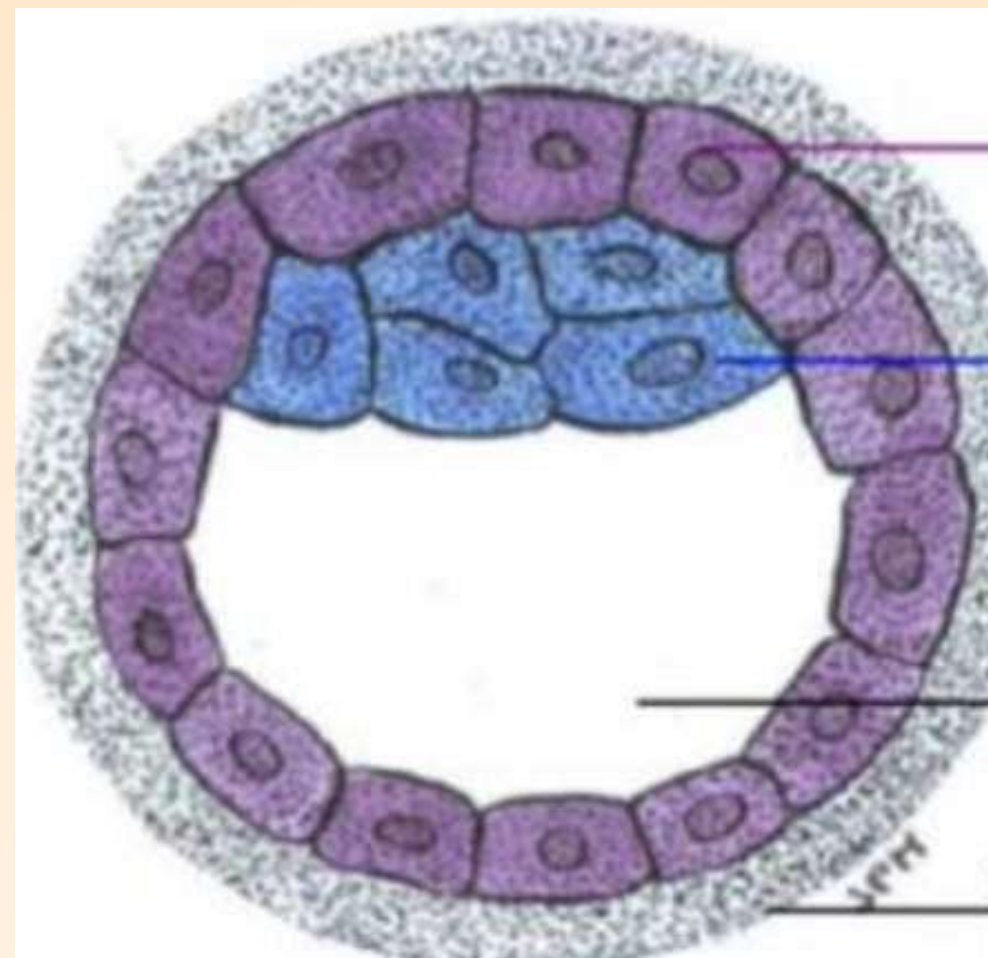
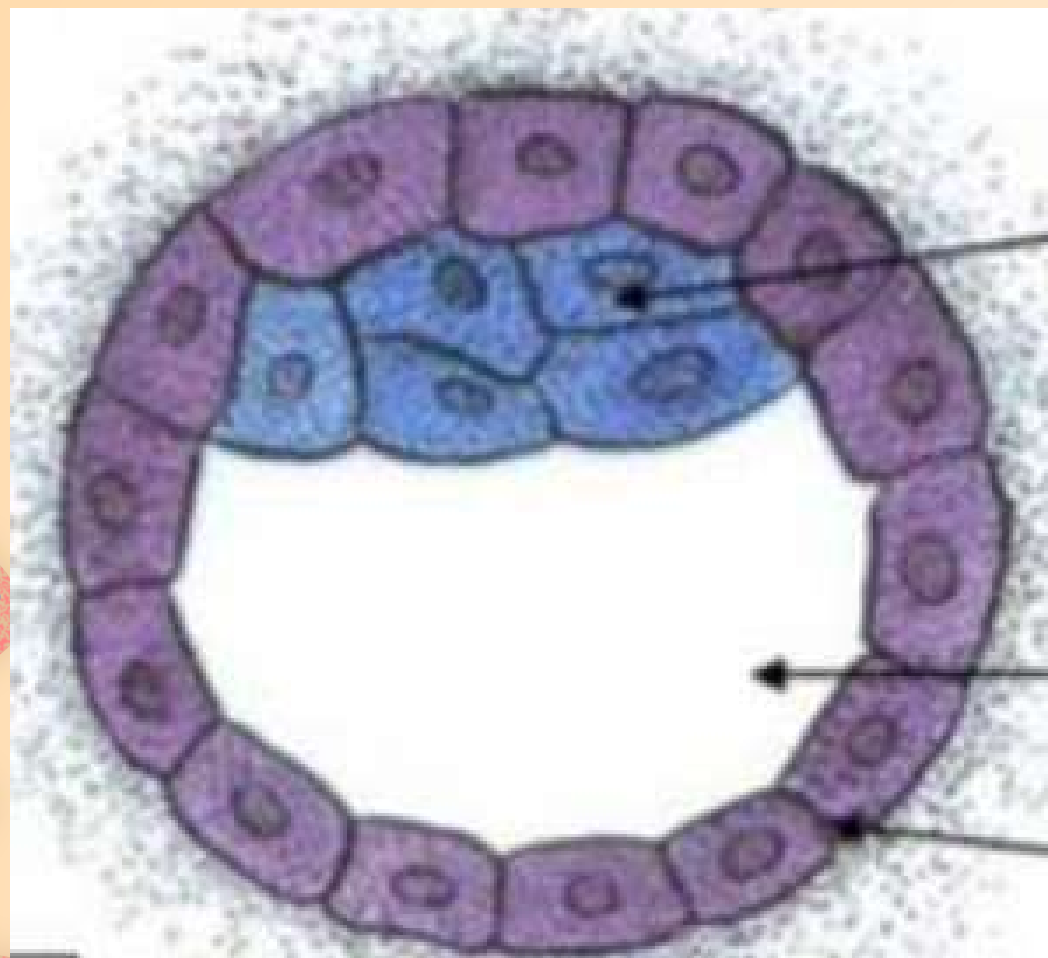
BLASTOCYSTE / CAVITATION : J5 CU

- MCI EXCENTRÉE PÔLE EMBRYONNAIRE
- BLASTOCÈLE

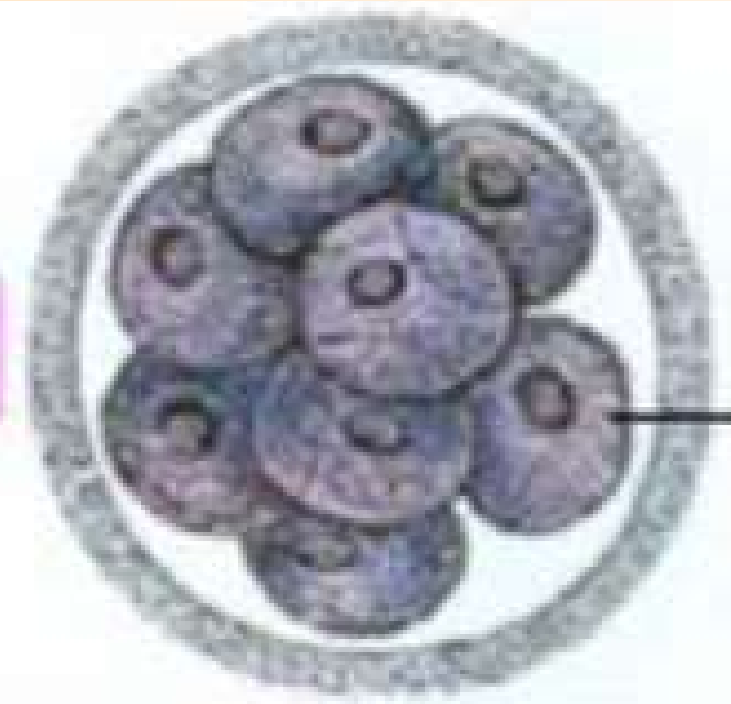
ECLOSION : J5 CU

- PÔLE ANTÉ/AB EMBRYONNAIRE
- LYSE ZP (STRYPSINE)

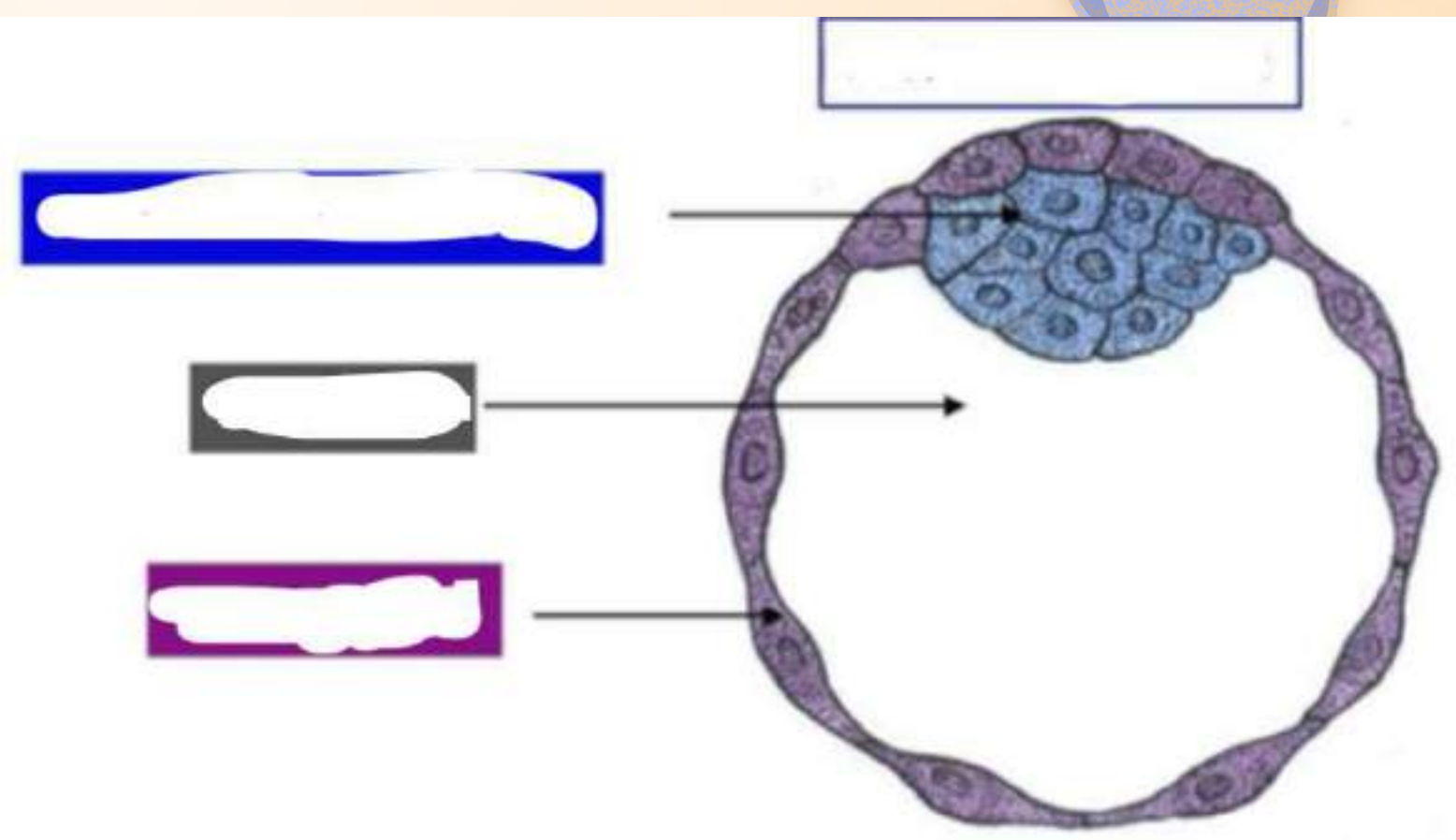
--> ACCOLEMENT EN POSTÉRO-SUPÉRIEUR



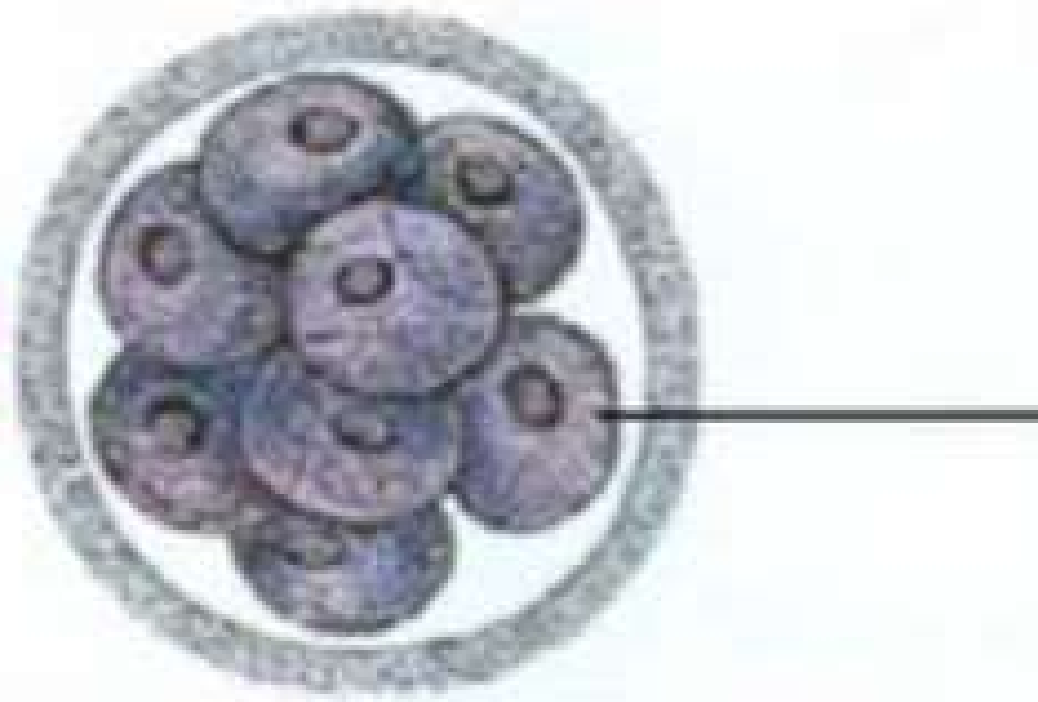
Cellules totipotentes



8 blastomères (précompaction)

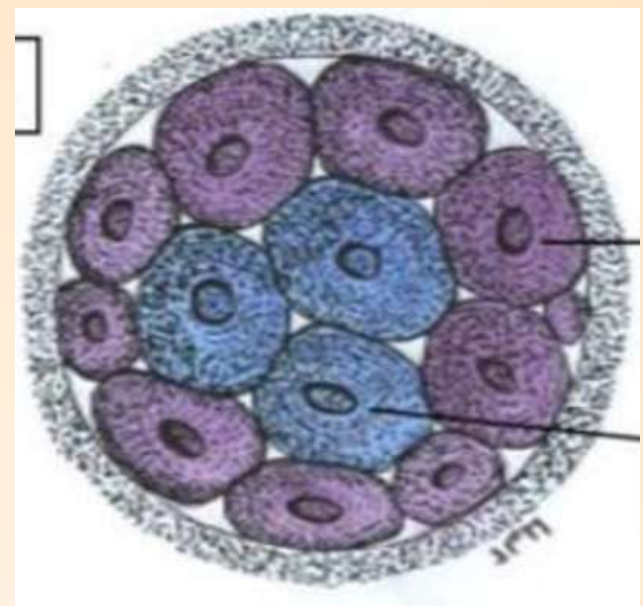


Cellules totipotentes



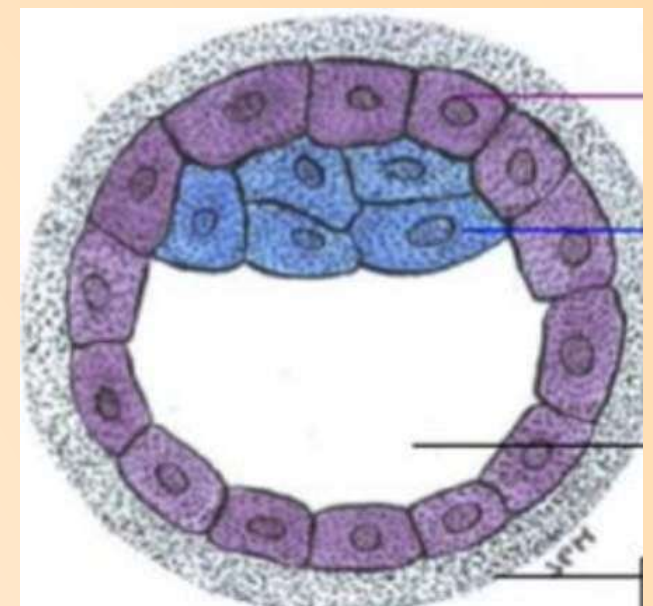
8 blastomères (précompaction)

PRÉ COMPACTION



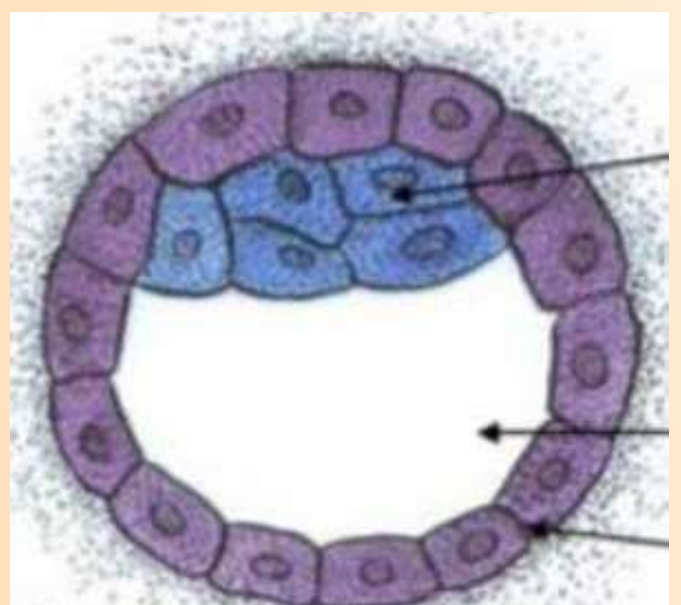
MORULA / COMPACTION

J4

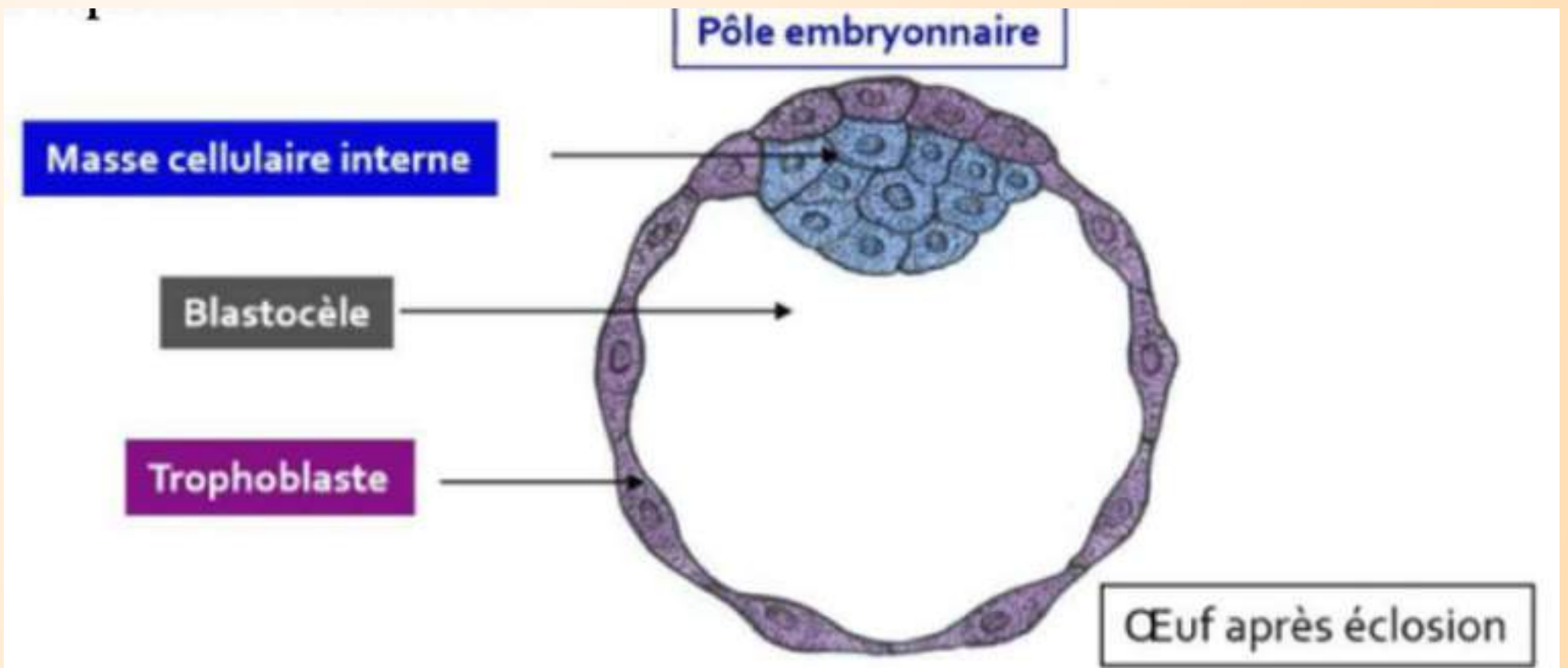


BLASTOCYSTE

J5



ECLOSION J5



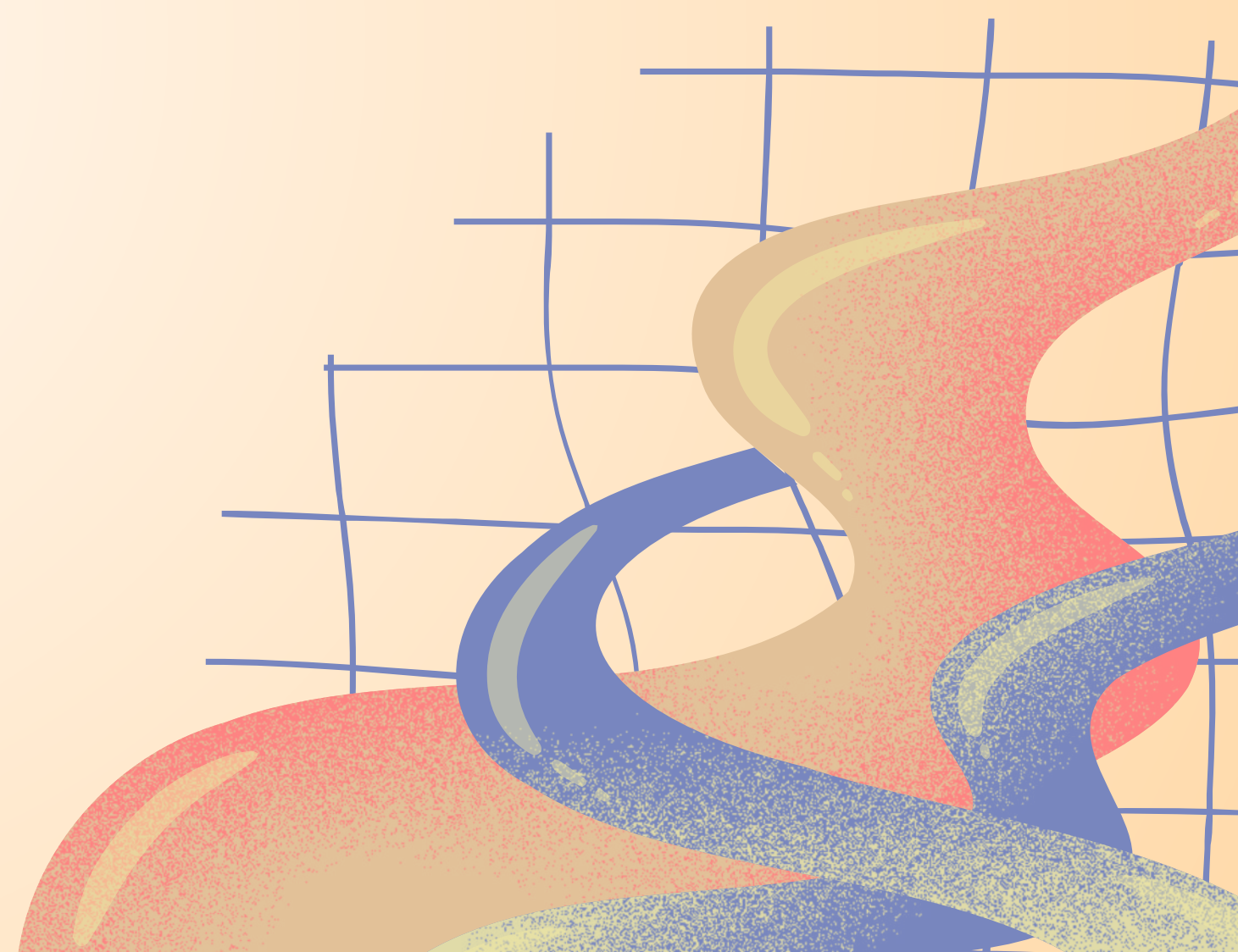
BILAN J5-J6





SEM AINE 2

NIDATION

- 1) APPOSITION J6
 - 2) ADHÉRENCE J6/7
 - 3) INTRUSION J6/7
 - 4) INVASION J7/9
- 

COUCHES DE L'UTÉRUS

💡 Récap des différentes couches de l'utérus :

❖ **Endomètre** (=muqueuse utérine) :

- Epithélium
- Membrane basale
- Chorion (=tissu conjonctif)

❖ **Myomètre** (musculeuse)

❖ **Adventice**



Merci à mes vieilles !

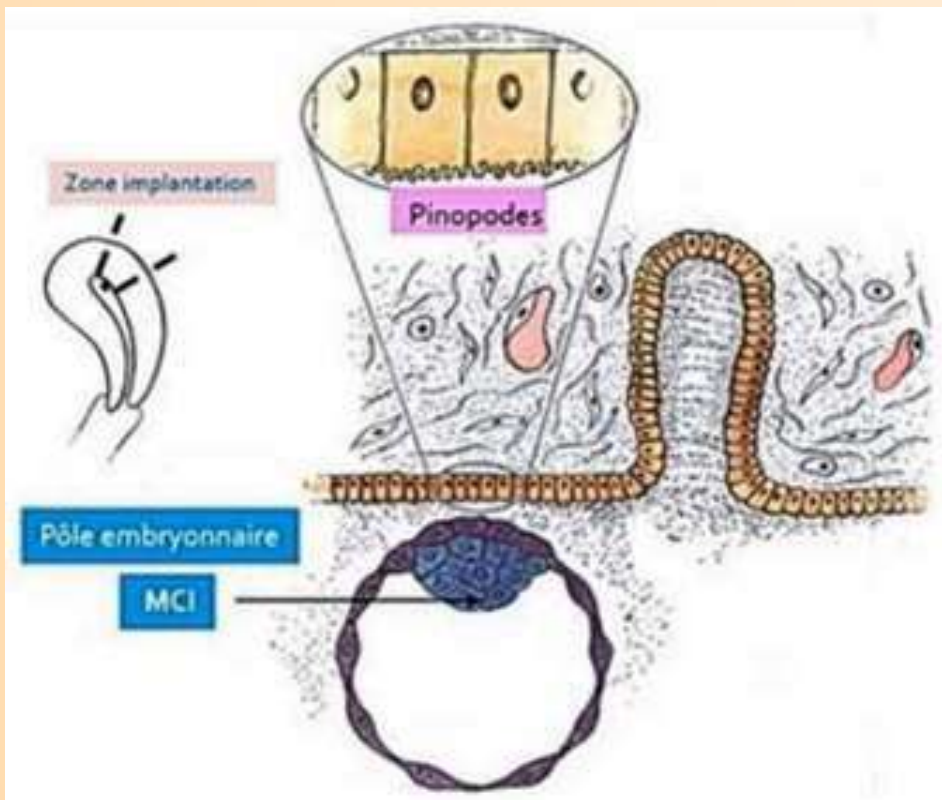
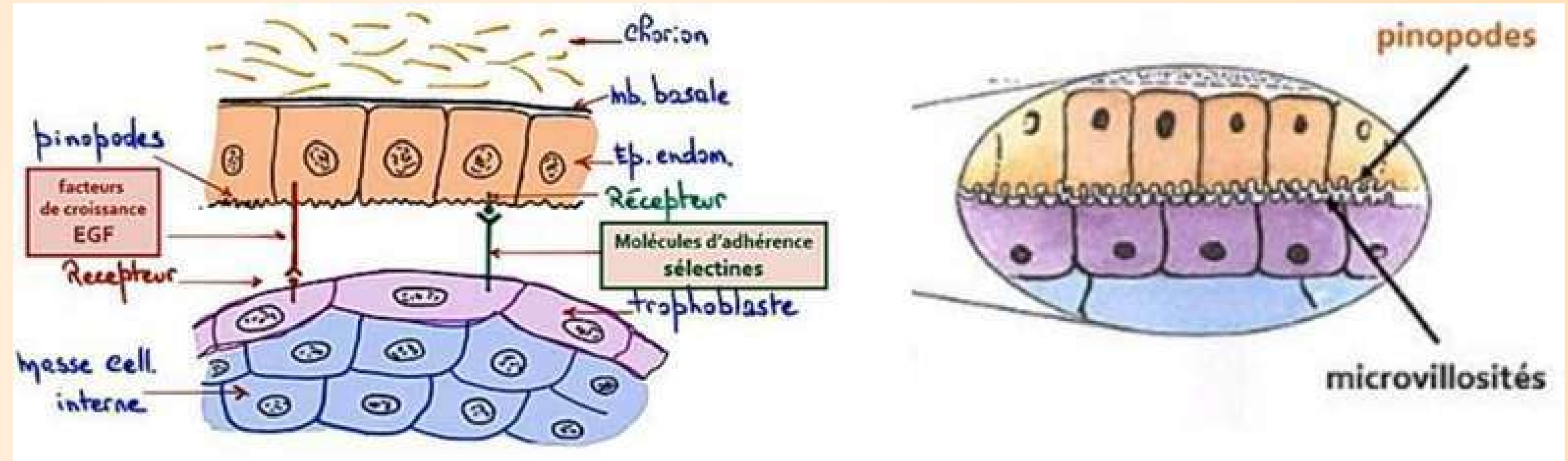
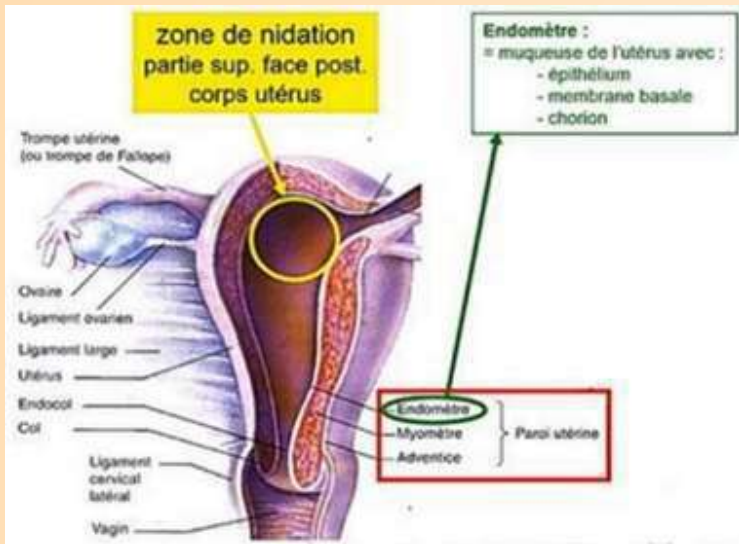
Apposition

J6

J20/J24 AMÉNORRHÉE

ACCOLEMENT DU BLASTOCYTE LIBRE

=J6



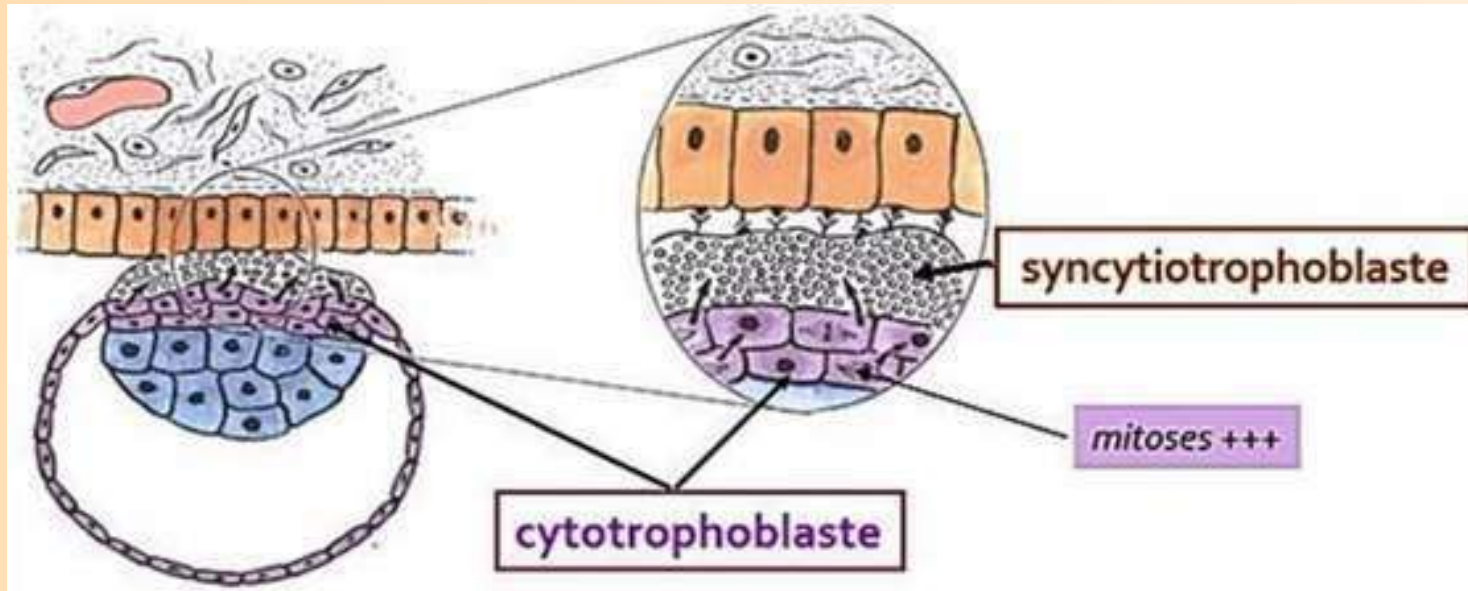
ENDOMÈTRE = RÉCEPTIVITÉ
EGF + RC SÉLECTINES + PINOPODES

BLASTOCYSTE = ACTIVATION
SÉLECTINES + RC EGF + MICROVILLOSITÉS

ADHÉRENCE

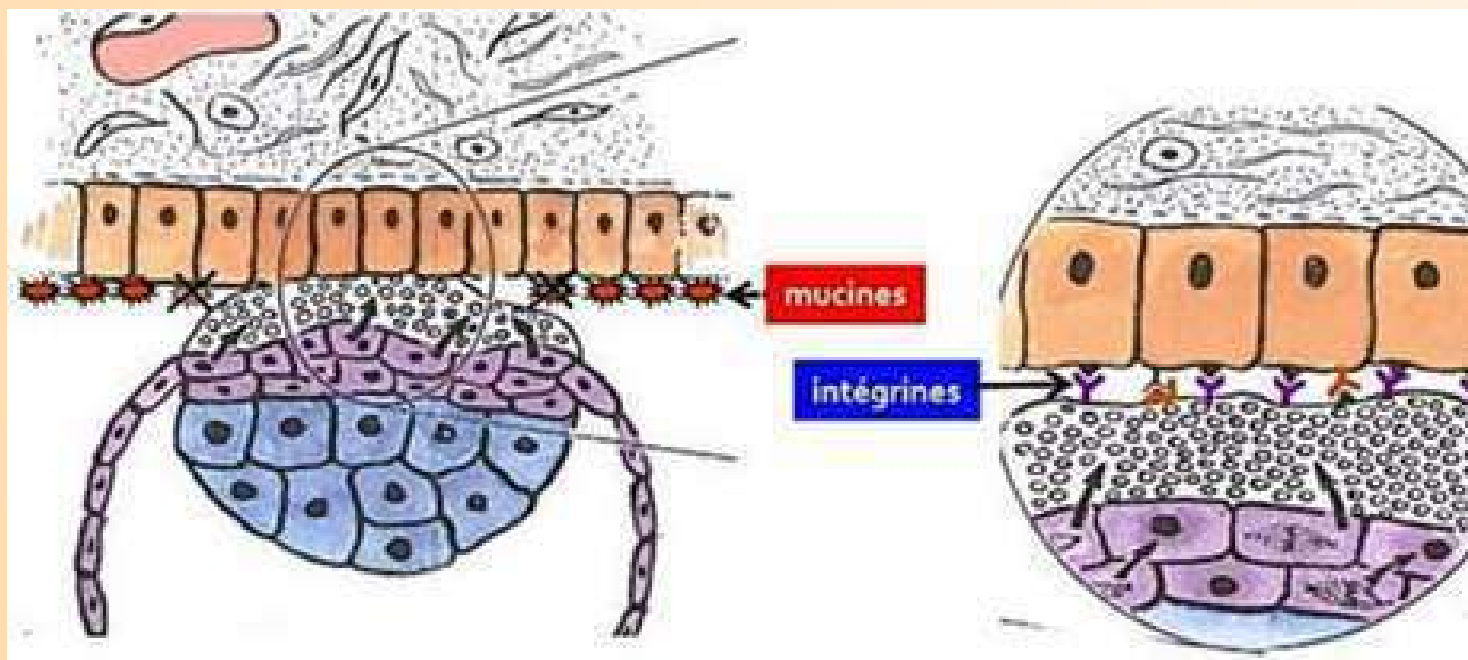
J6/7

FIXATION DU BLASTOCYTE LIBRE



CTT --> STT PAR DIVISION NUCLÉAIRE SANS CYTODIÉRÈSE

STT --> CLIVAGE DES MUCINES



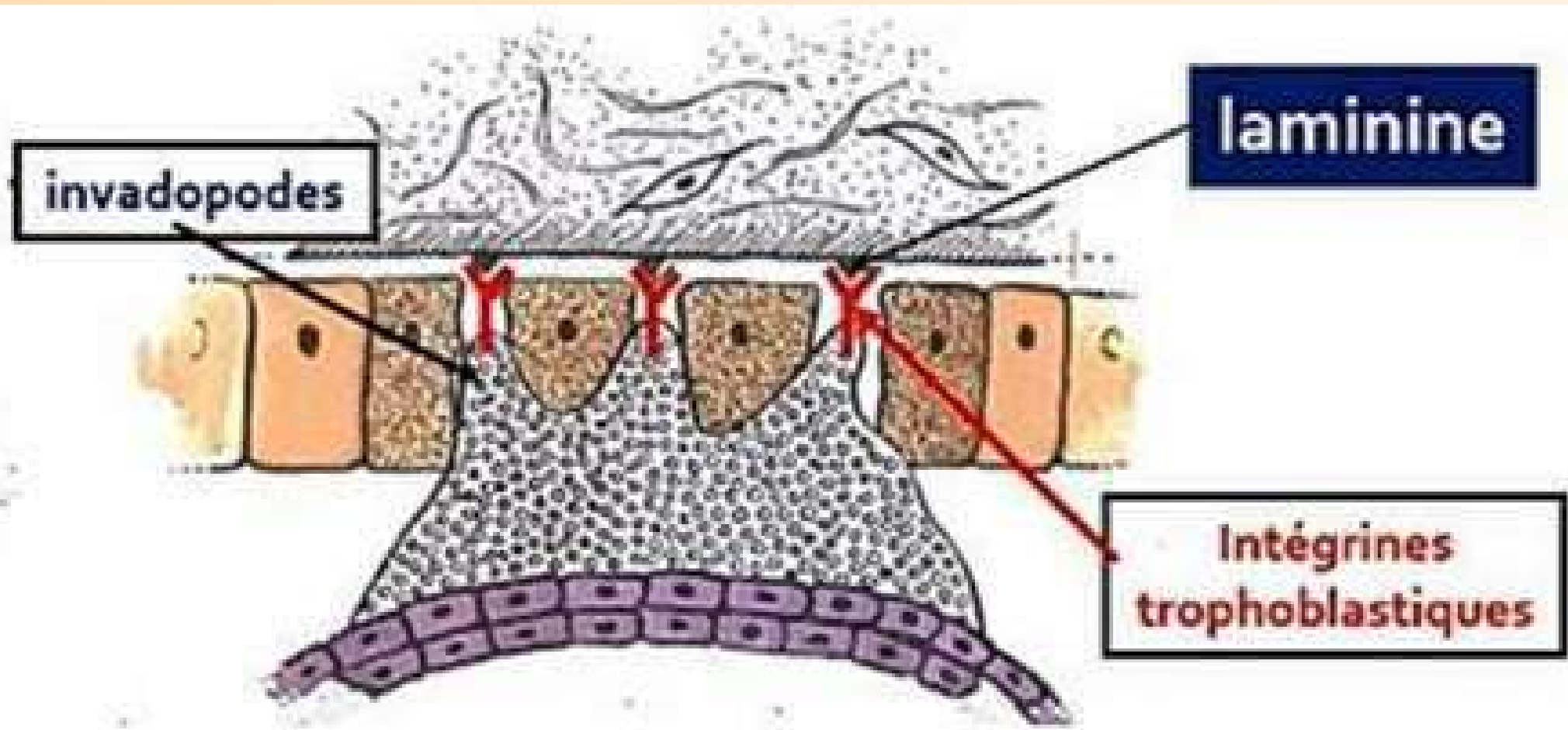
INTÉGRINES ENDOMÉTRIALES DÉMASQUÉES



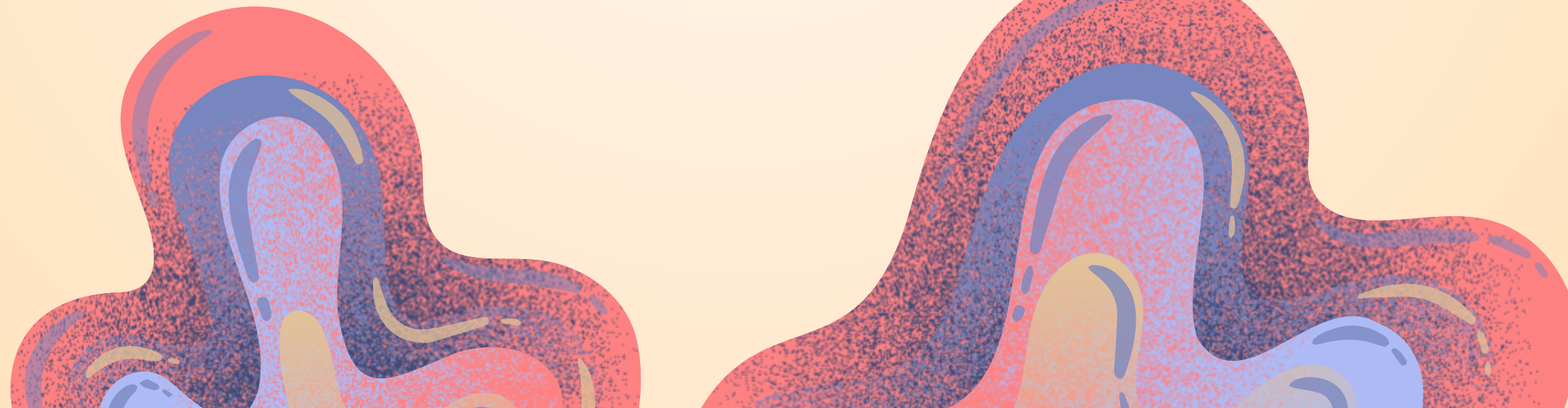
INTRUSION

J6/7

DISSOCIATION DE L'EPITHELIUM



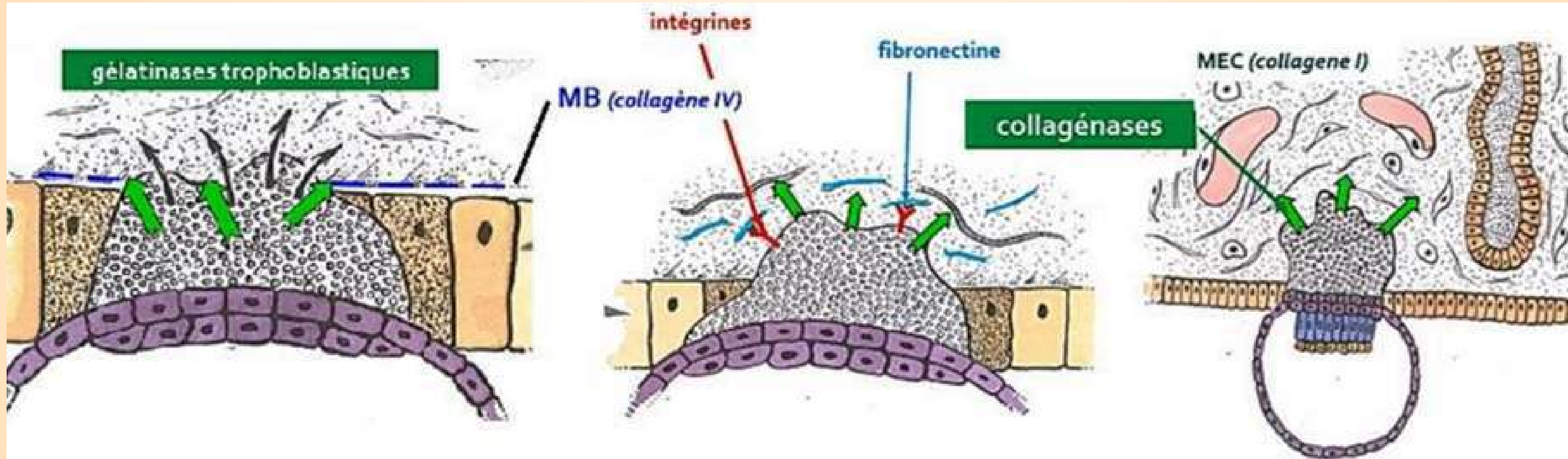
INVADOPODES + INTEGRINES --> LAMININE MB



INVASION

COLONISATION DU CHORION

J7/9



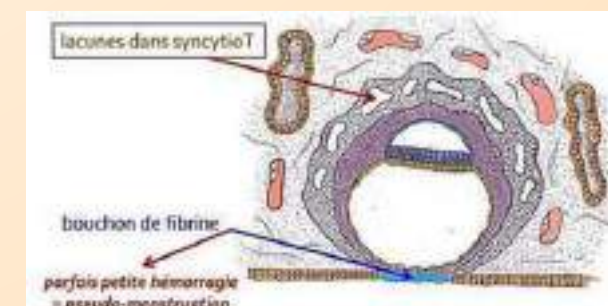
Les **gélatinases trophoblastiques** digèrent les fibres de **collagènes IV**

1) Destruction locale de la MB

Reconnaissance entre les **intégrines** du STT et les **fibronectines** du chorion

2) Progression de l'œuf dans le chorion

Les **collagénases trophoblastique** digèrent du **collagène de type I** de la MEC.



J10

SEM AINE 3

GASTRULATION

- LIGNE PRIMITIVE (J15)
- NOEUD PRIMITIF (J16)
- MIGRATION & DIFFÉRENCIATION (J16)

FORMATION DE LA CHORDE

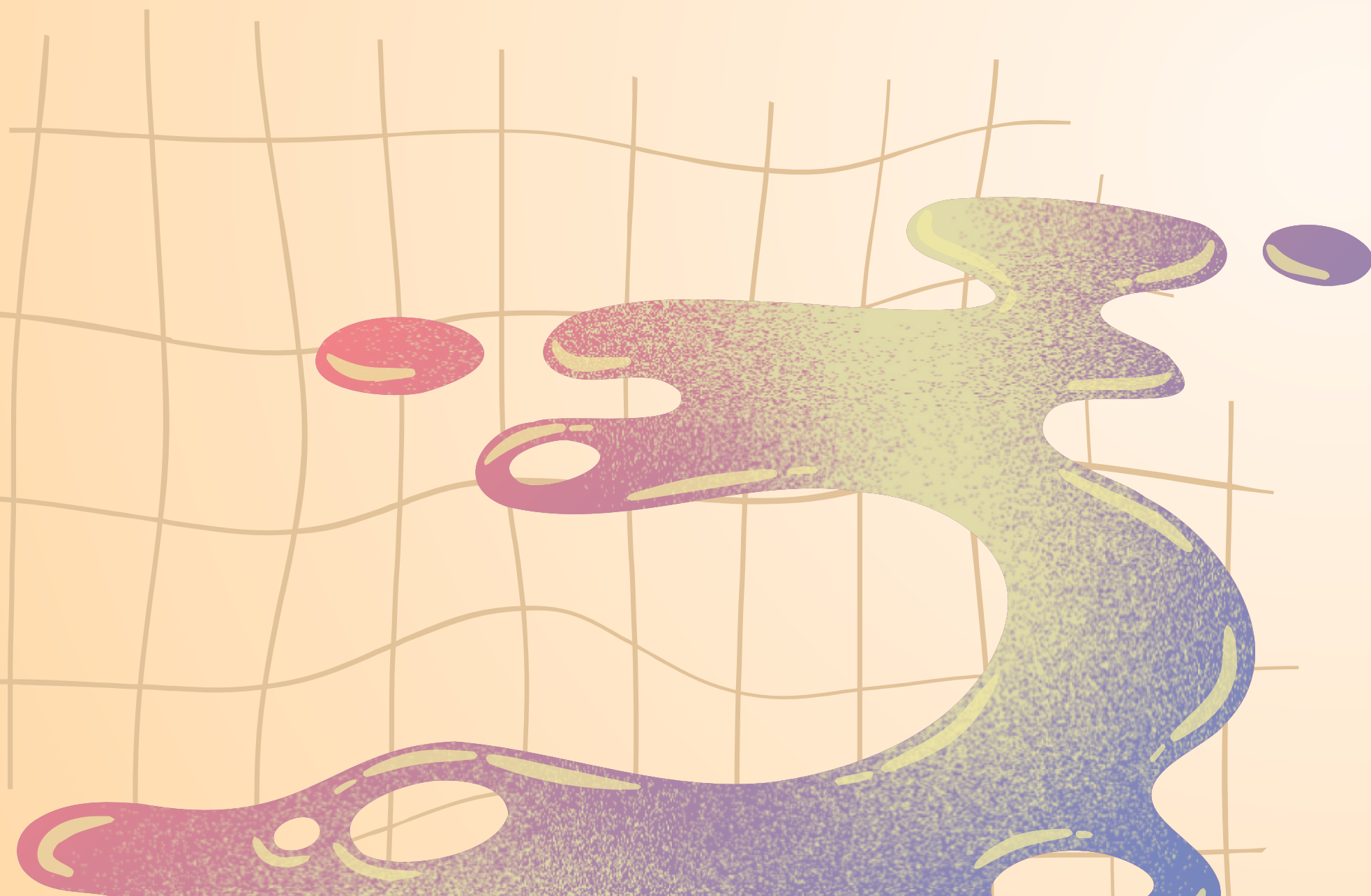
- PROCESSUS CHORDAL (J17)
- CANAL CHORDAL
- PLAQUE CHORDALE
- CHORDE (J19)

NEURULATION PRIMAIRE

- PLAQUE NEURALE (J19)
- GOUTTIERE NEURALE (J20)
- TUBE NEURAL (J22)

ANNEXES DE LA 3ÈME SEMAINE

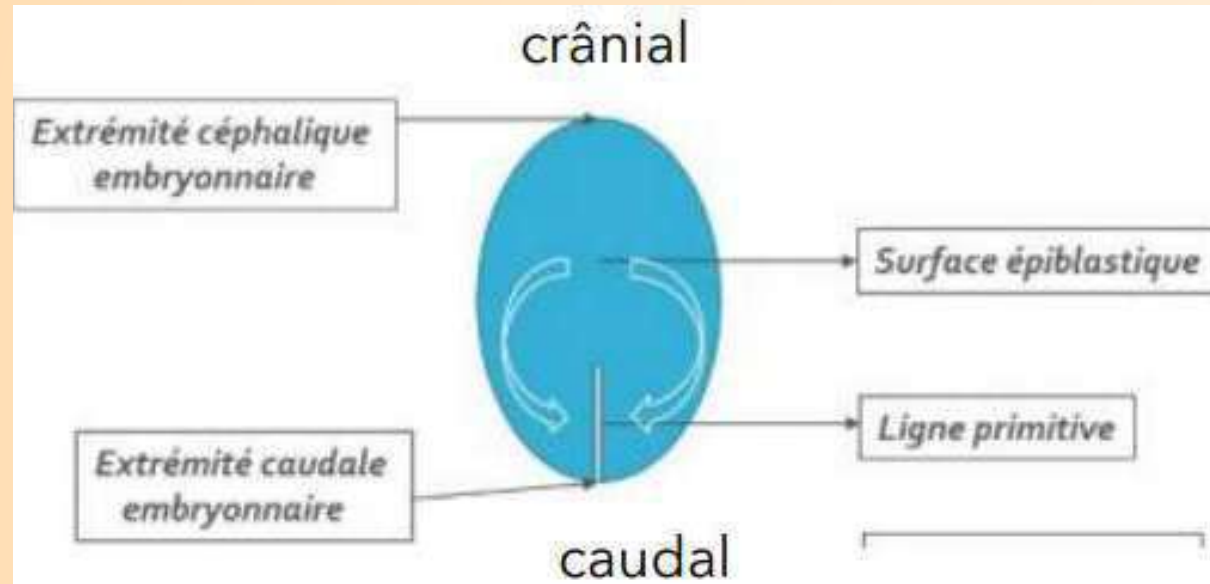
- ALLANTOÏDE (J16)
- GONOCYTES PRIMORDIAUX (J18)
- ÎLOTS ANGIOFORMATEURS DE WOLFF & PANDER



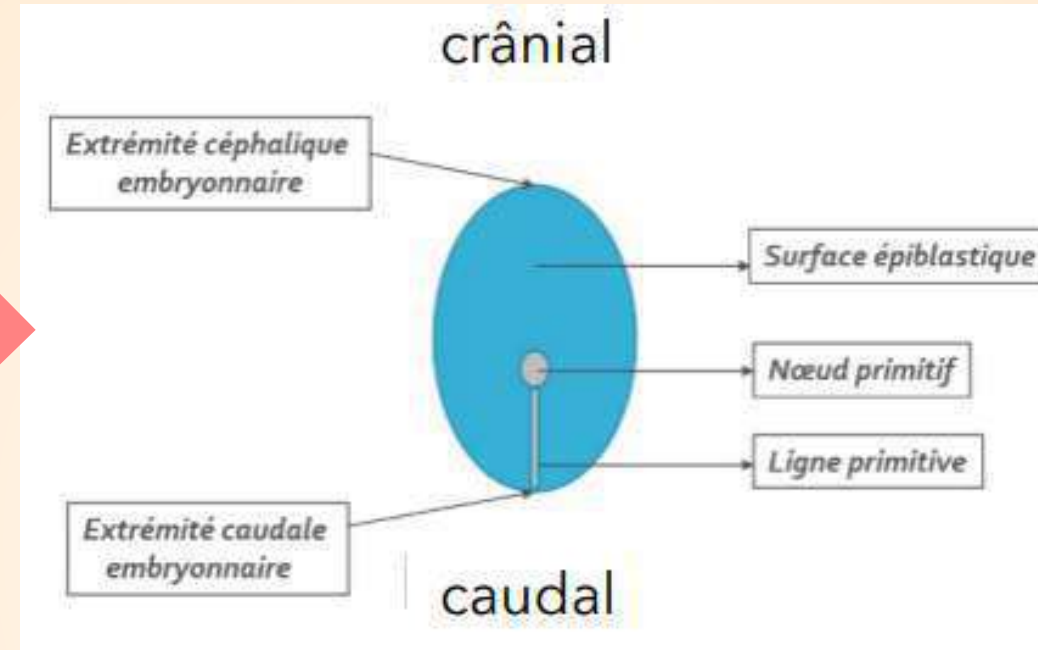
GASTRULATION



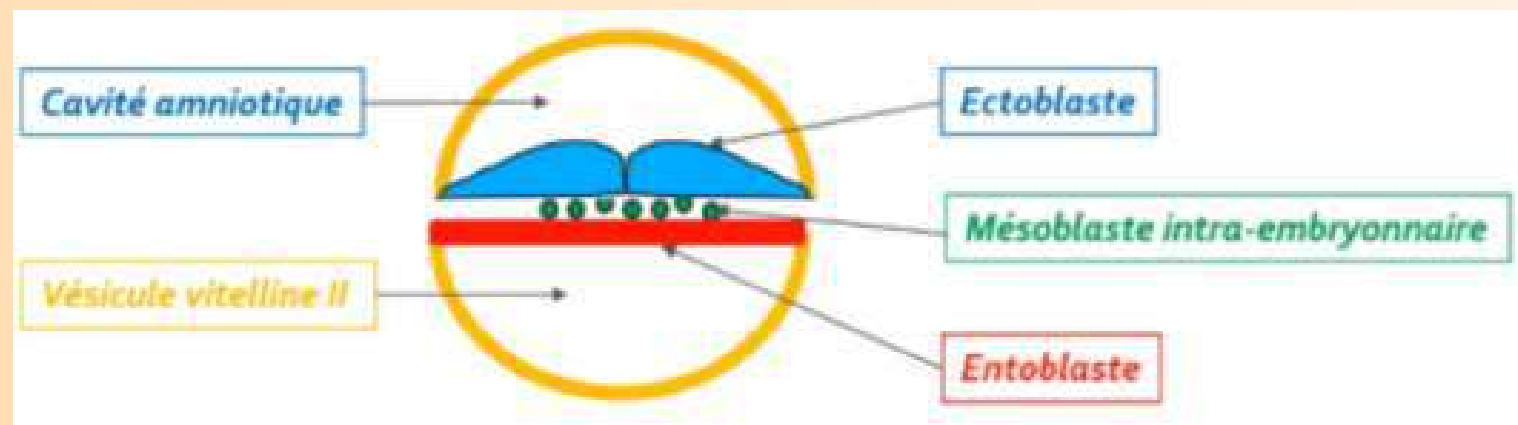
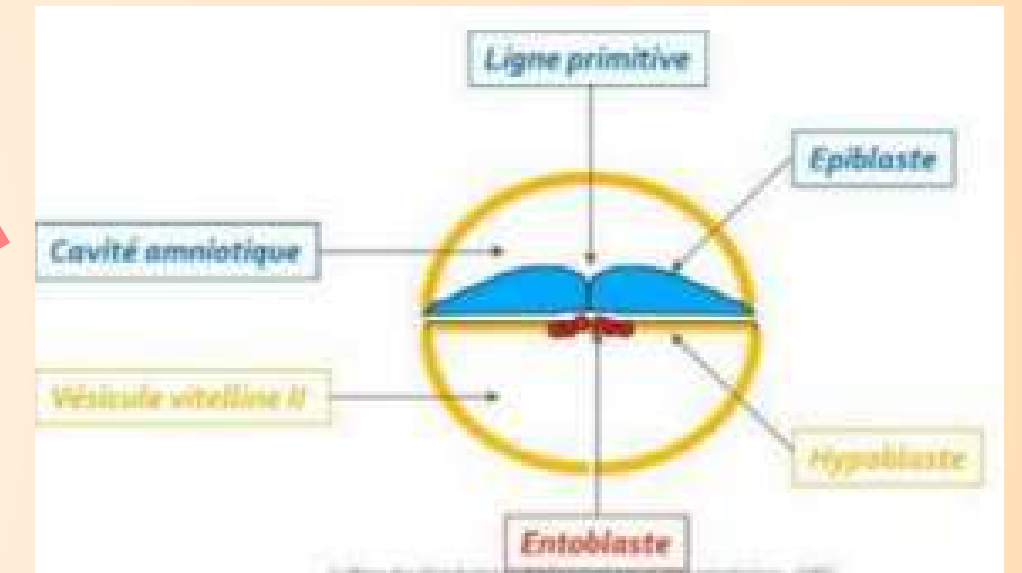
LIGNE PRIMITIVE (J15)



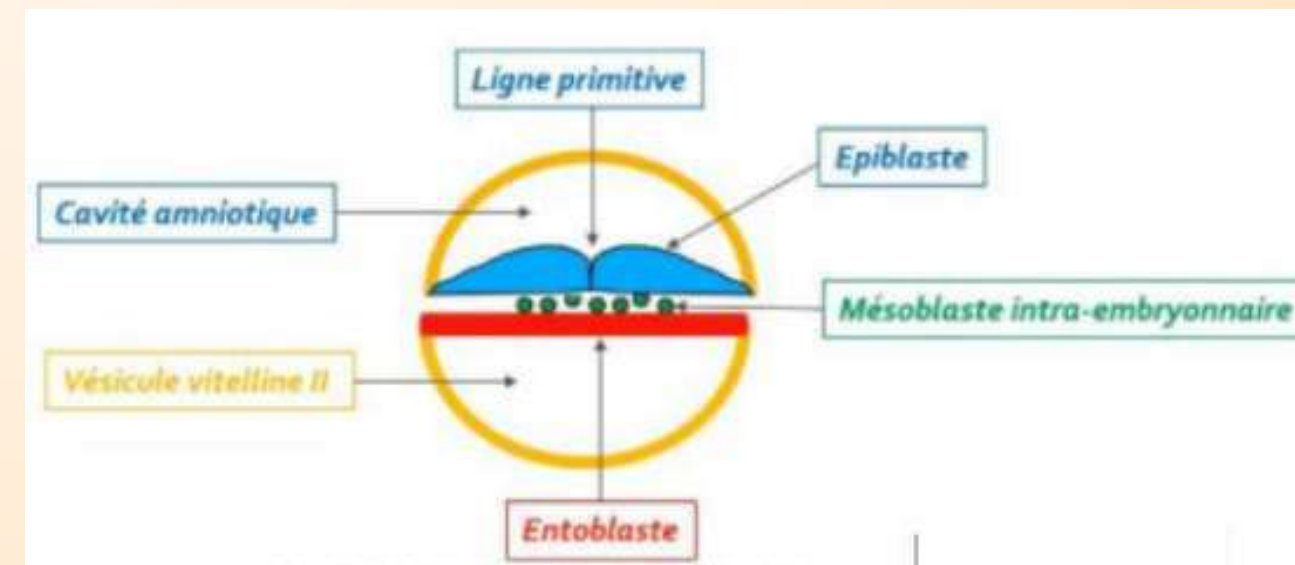
NOEUD PRIMITIF (J16)



ENTOBLASTE



ECTOBLASTE



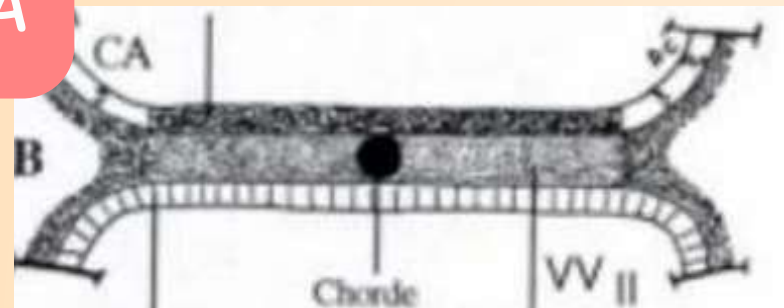
MESOBLASTE INTRA-EMBRYONNAIRE



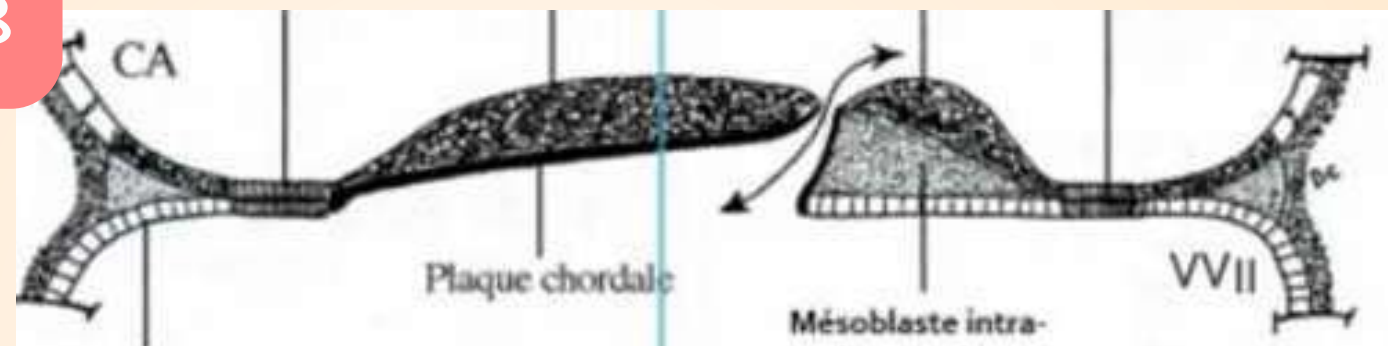
QUIZ - FORMATION DE LA CHORDE

DONNER LE BON ORDRE DE CES DIFFÉRENTS SCHÉMAS ET DIRE À QUEL ÉTAPE CELA CORRESPOND... /!\ PARFOIS PLUSIEURS SCHEMAS POUR 1 ÉTAPE !

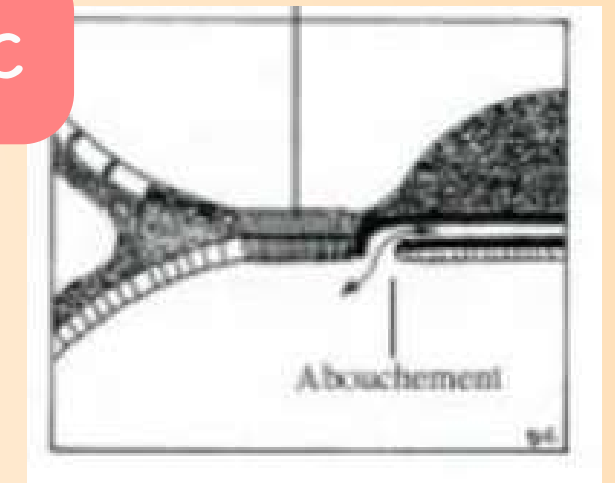
A



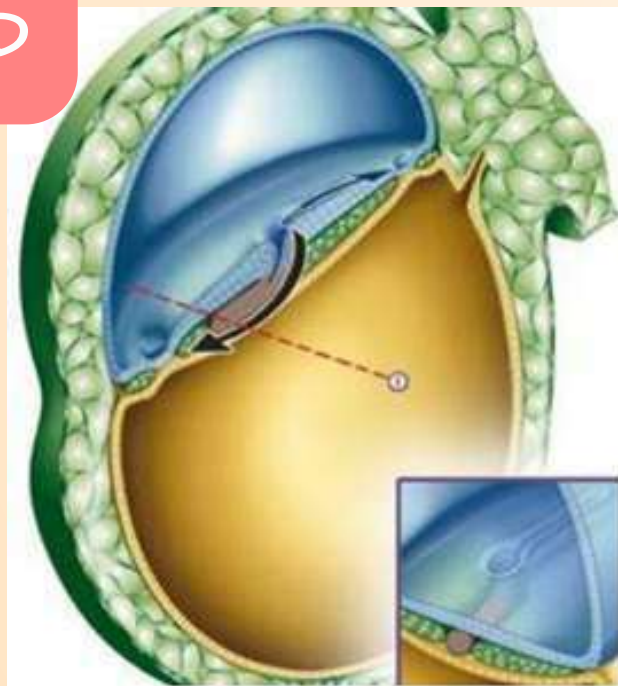
B



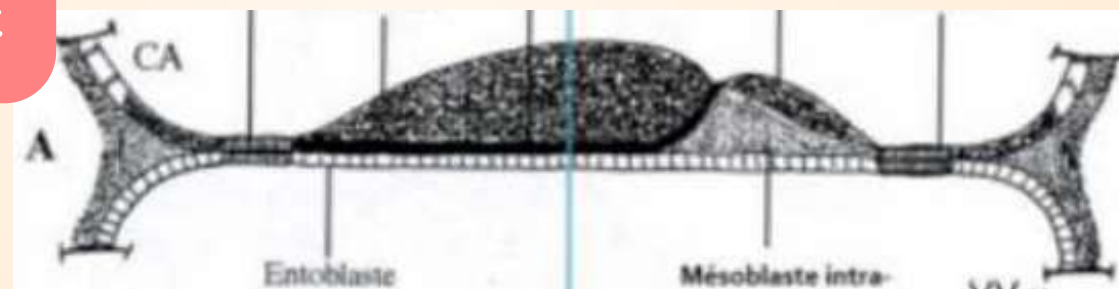
C



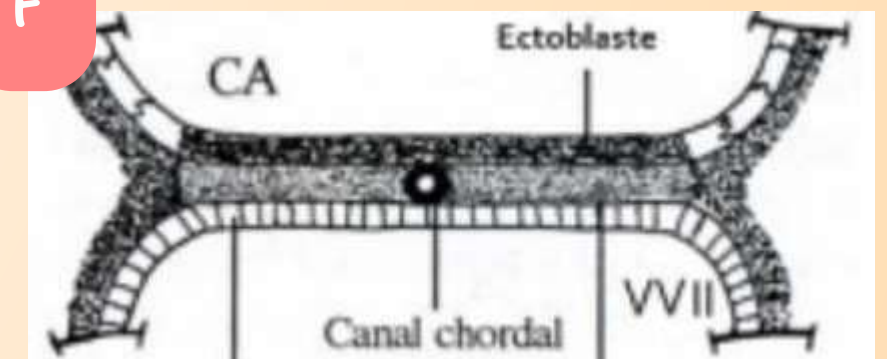
D



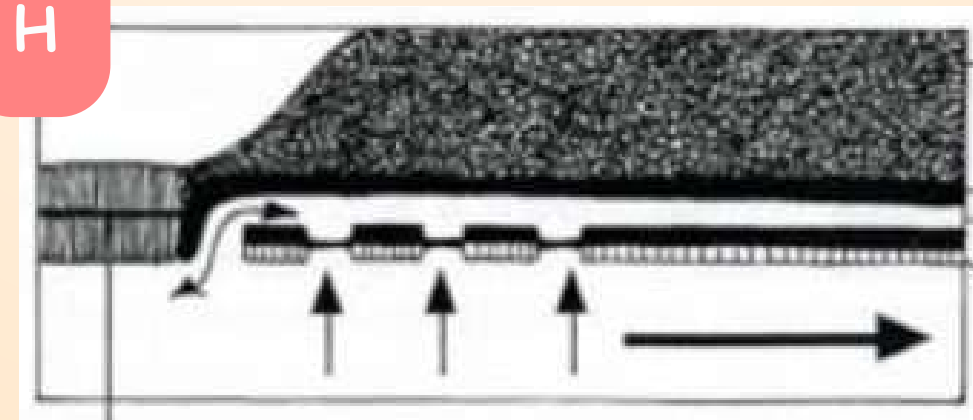
E



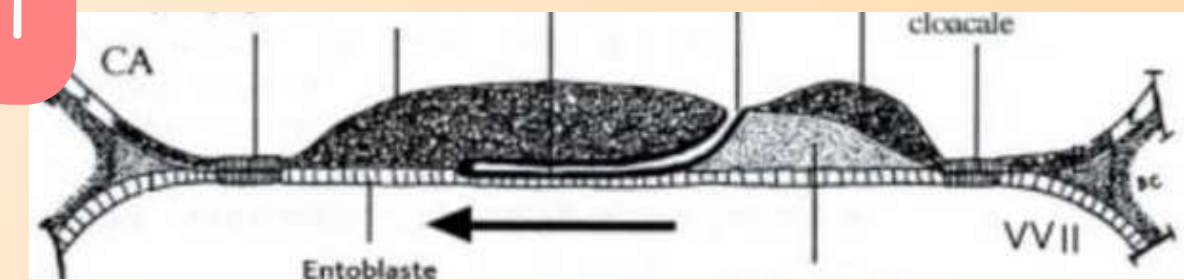
F



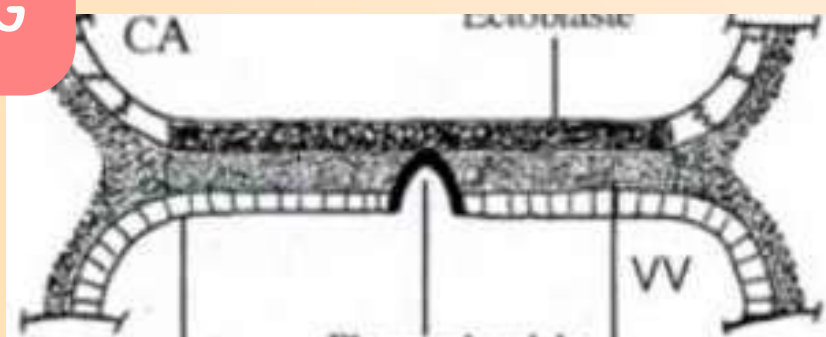
H



I

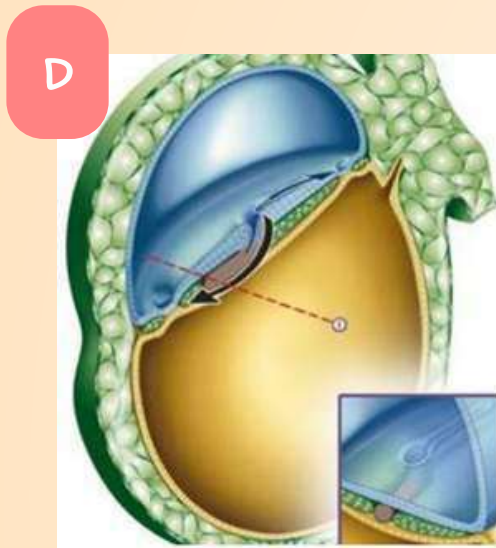


G

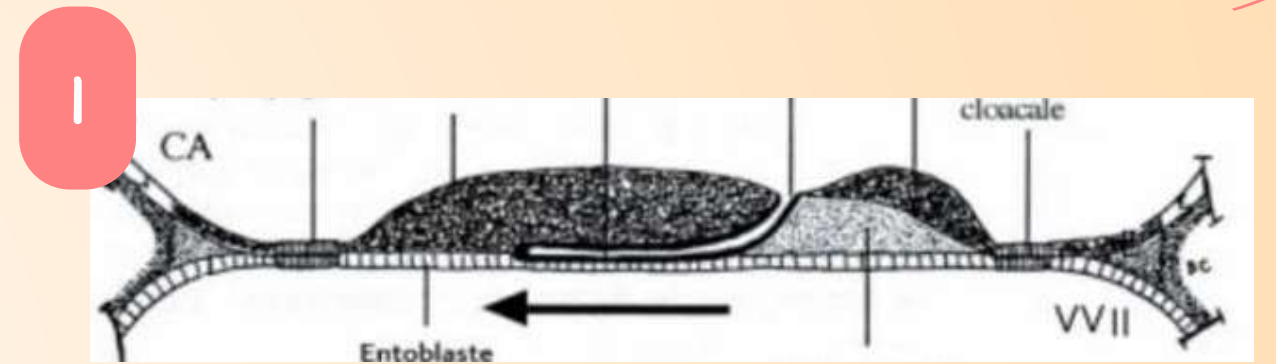
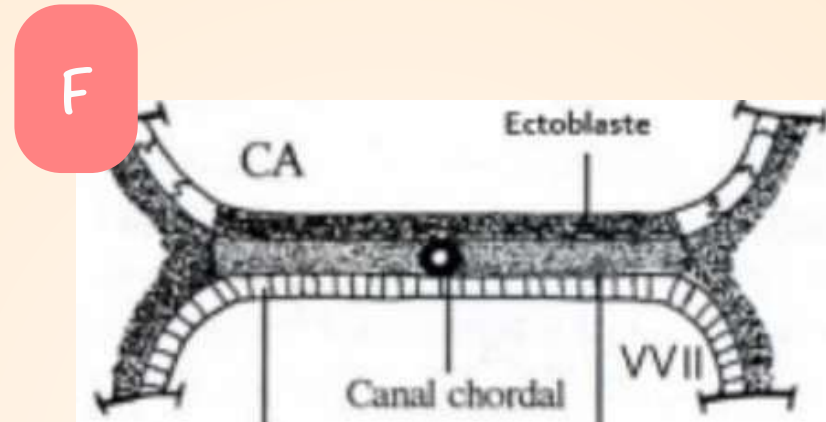


RÉPONSES

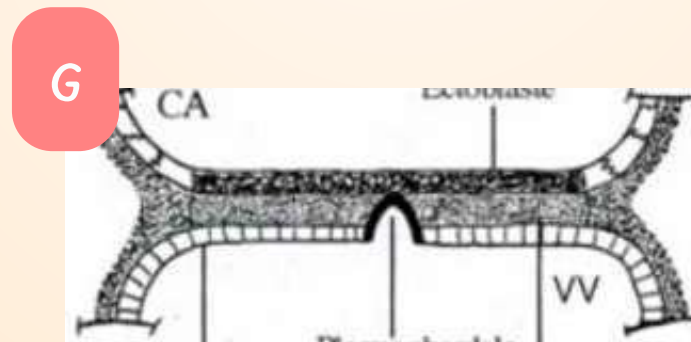
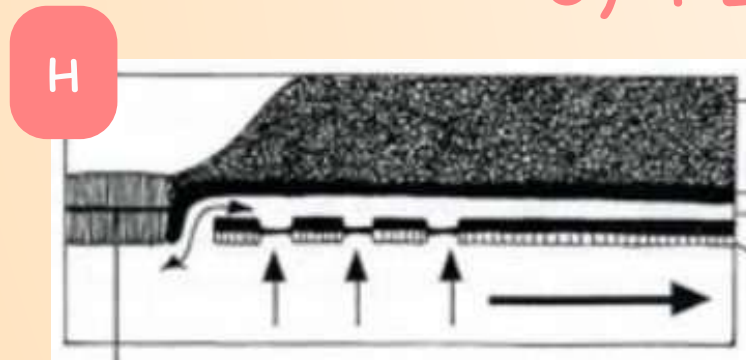
1) PROCESSUS CHORDAL (D)



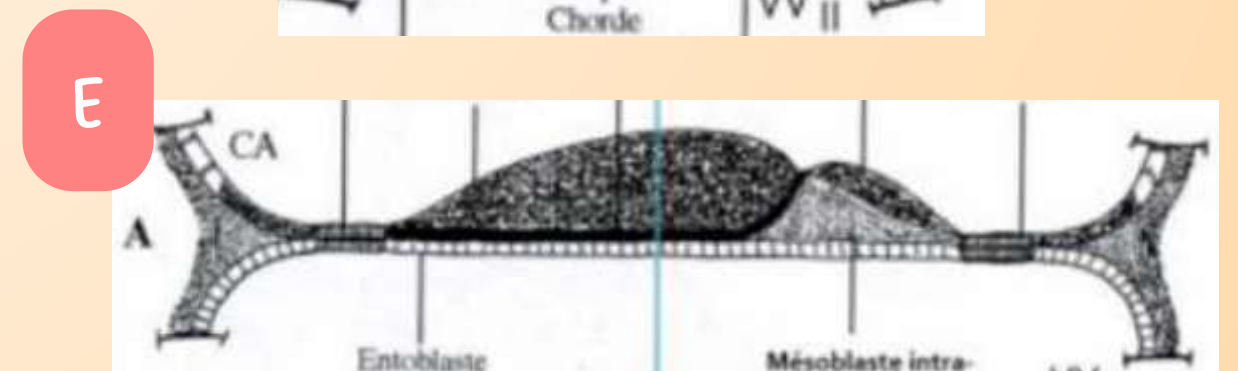
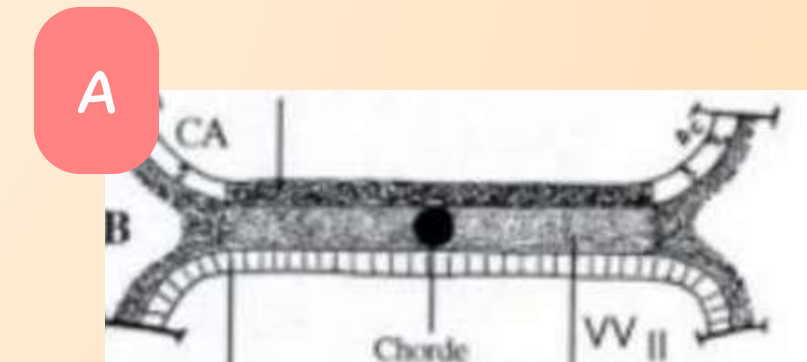
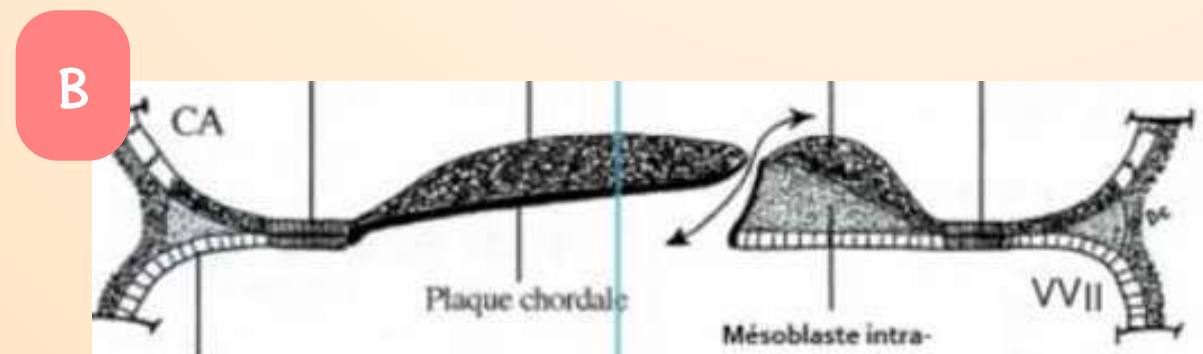
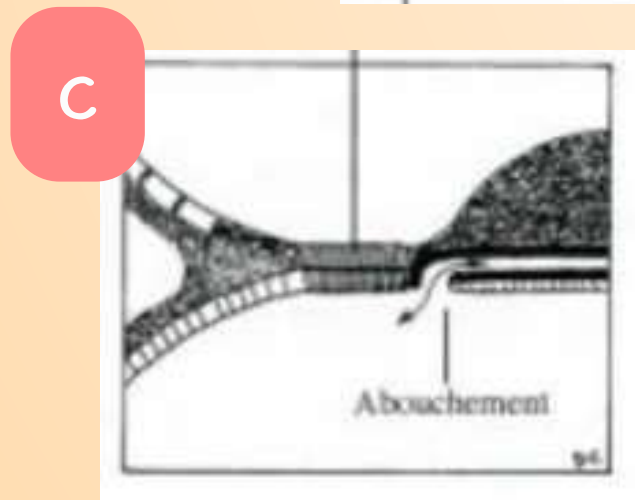
2) CANAL CHORDAL (F & I)



3) PLAQUE CHORDALE (C, H, B & G)

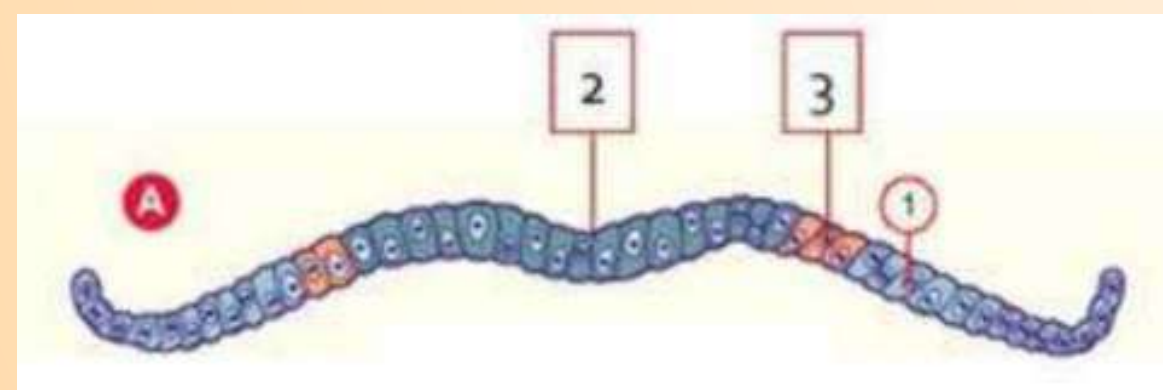
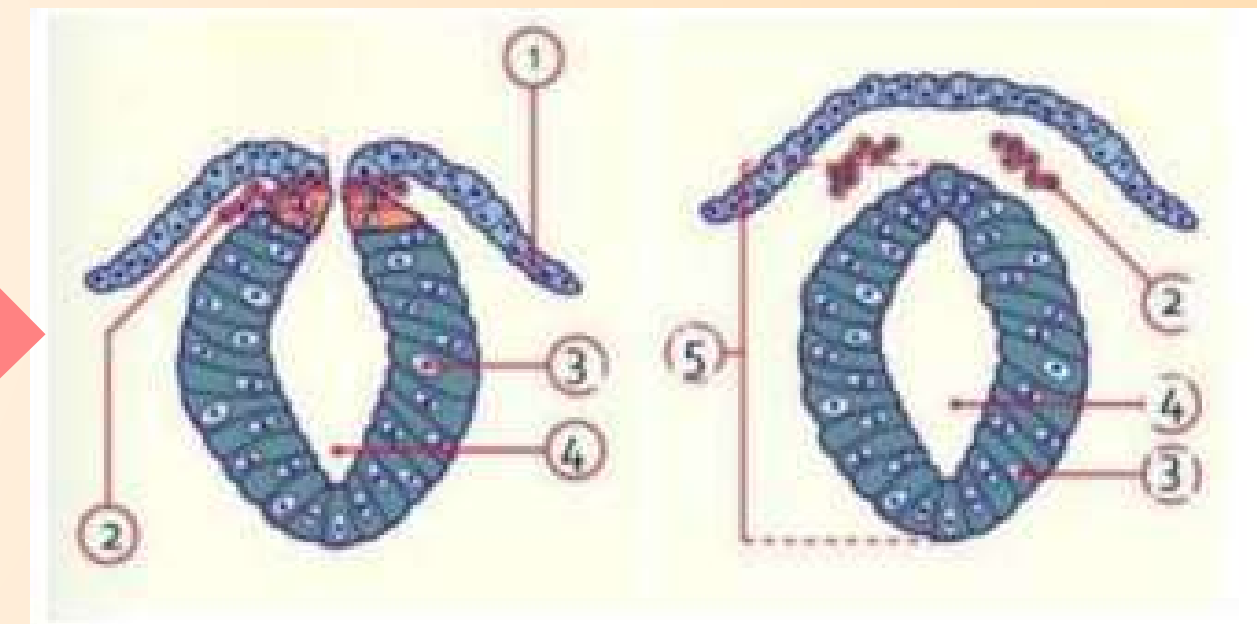
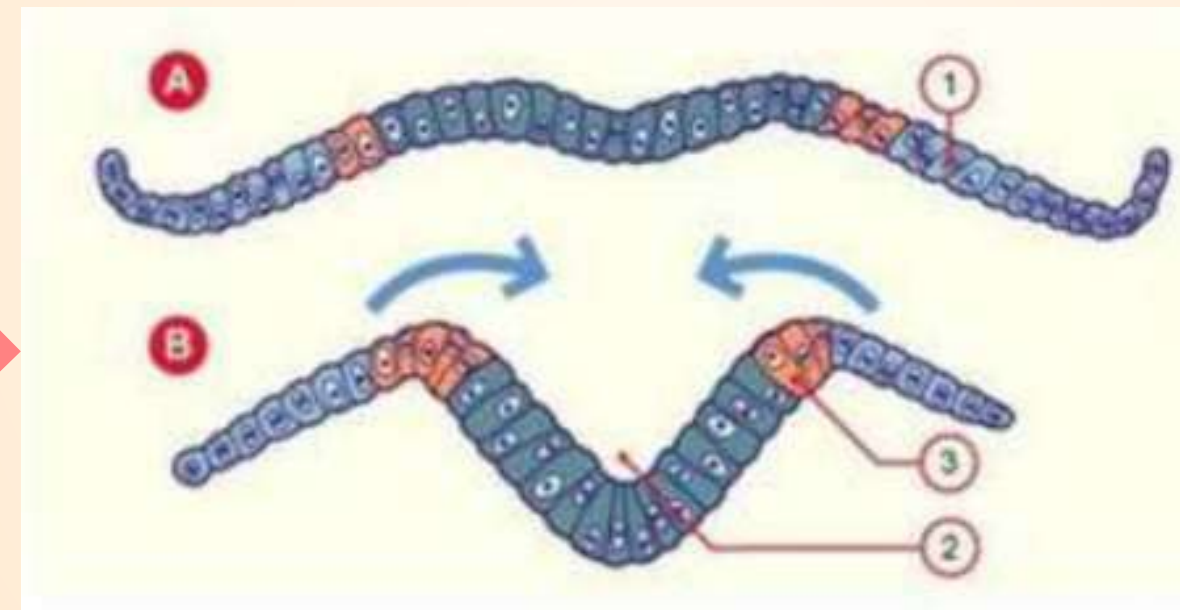
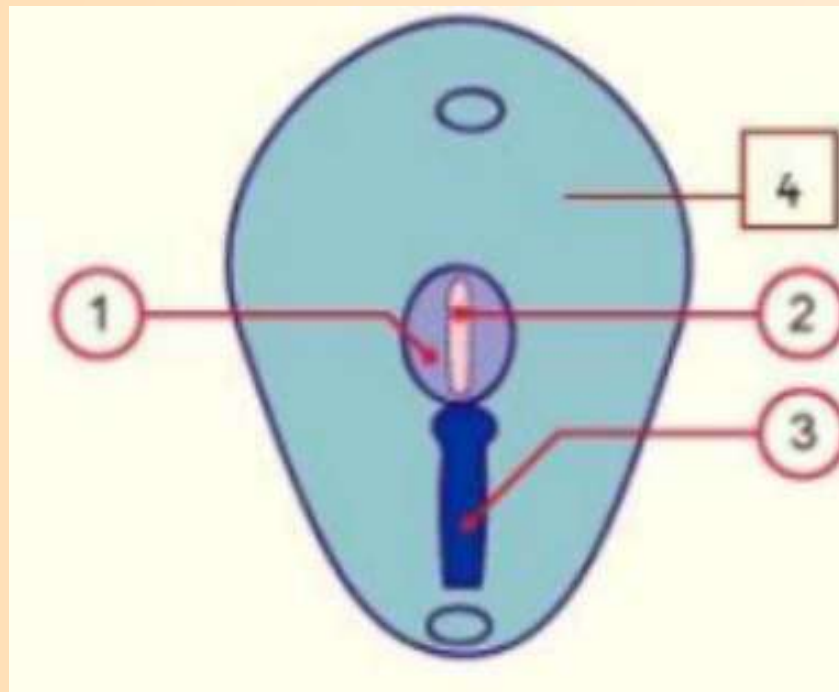


4) CHORDE (A & E)



NEURULATION PRIMAIRE

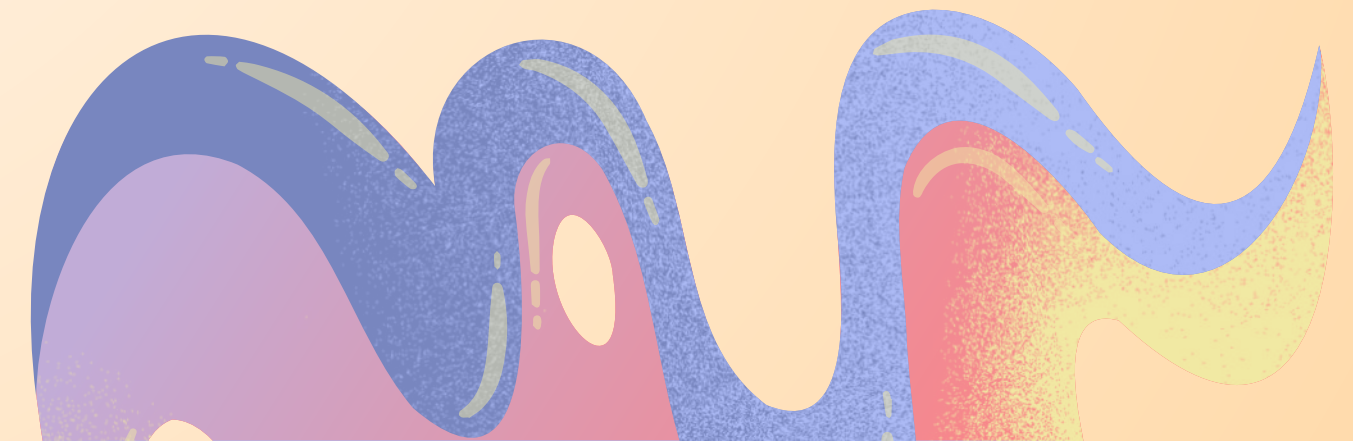
NOMMER LES STRUCTURES CHIFFRÉES...



1) PLAQUE NEURALE (J19)

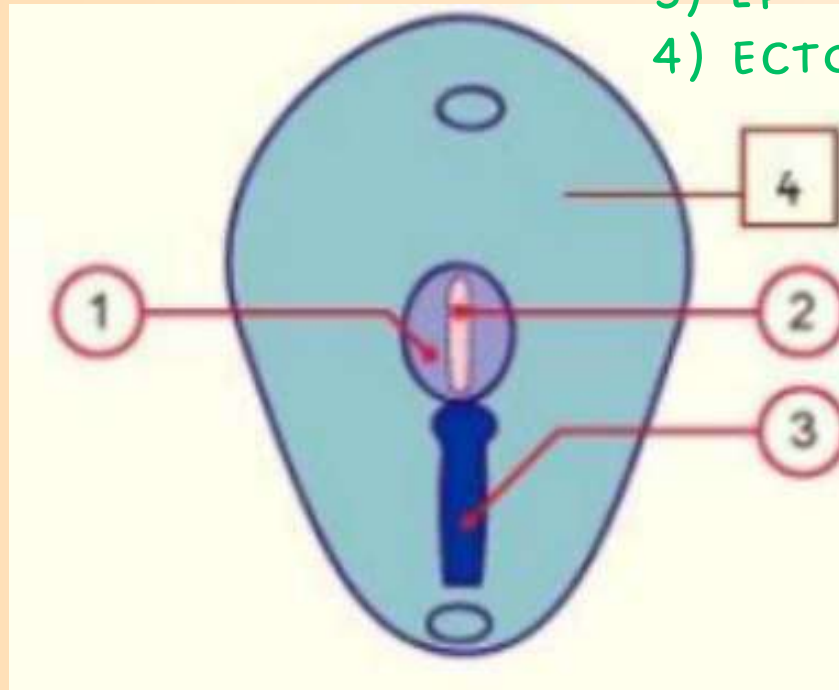
2) GOUTTIÈRE NEURALE (J20)

3) TUBE NEURAL (J22)



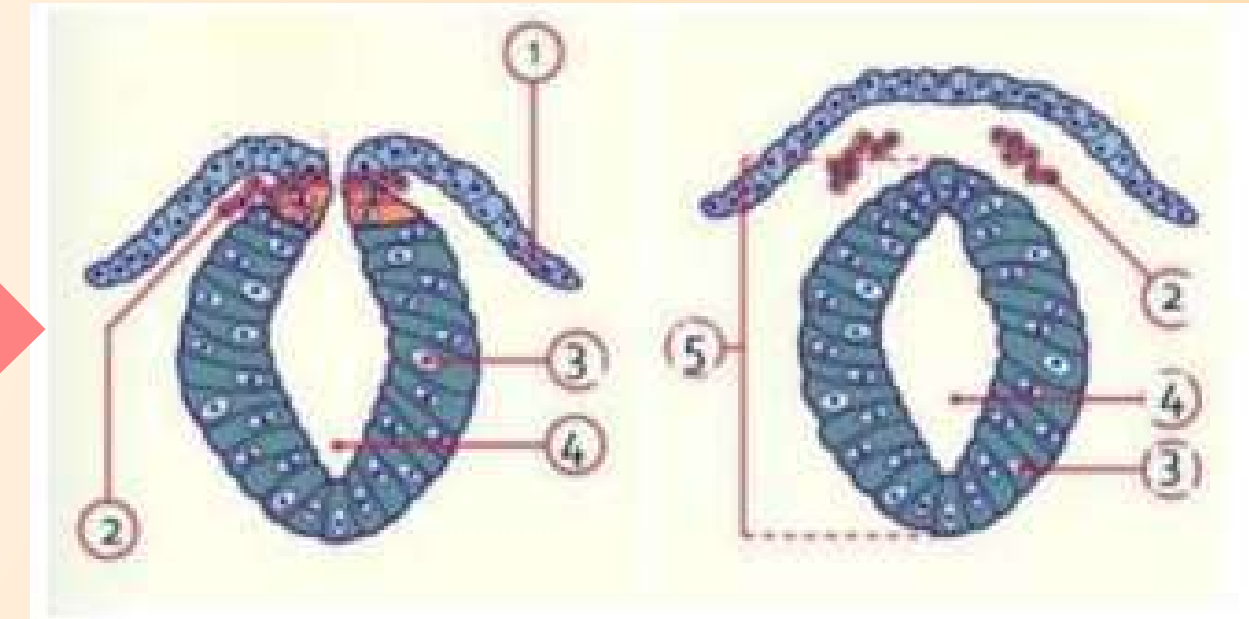
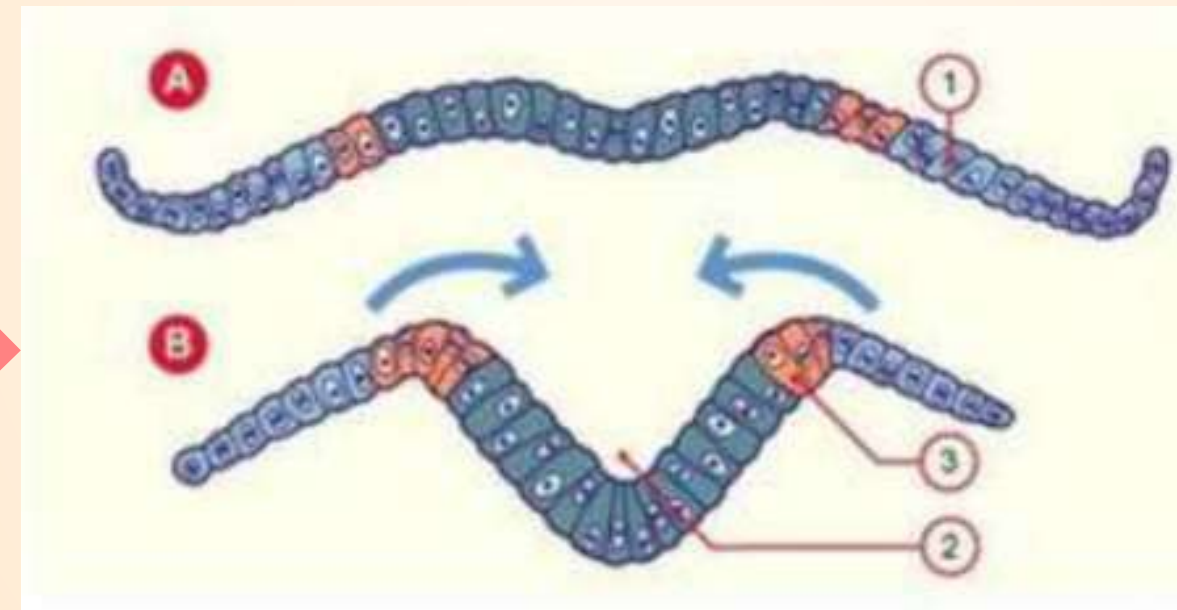
NEURULATION PRIMAIRE

- 1) PLAQUE NEURALE
- 2) CHORDE
- 3) LP
- 4) ECTOBLASTE



CORRECTION

- 1) EPIBLASTE II
- 2) CRÊTES NEURALES EN MIGRATION
- 3) NEURECTOBLASTE
- 4) CANAL ÉPENDYMAIRE
- 5) TUBE NEURAL



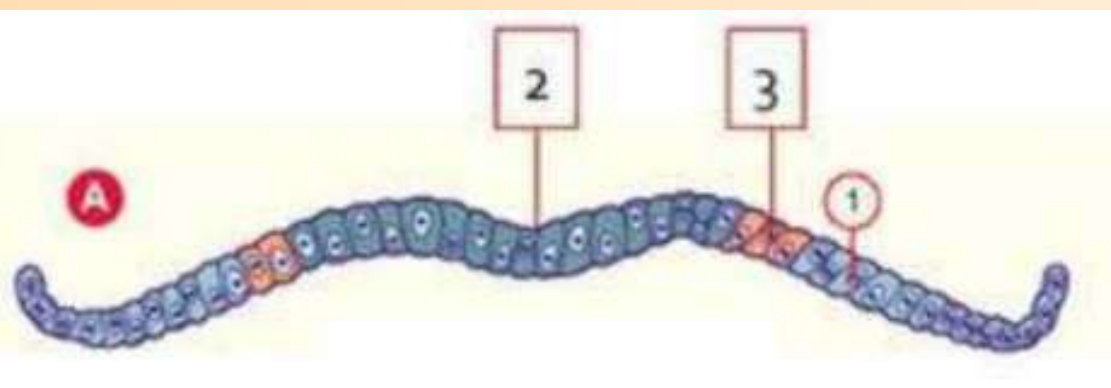
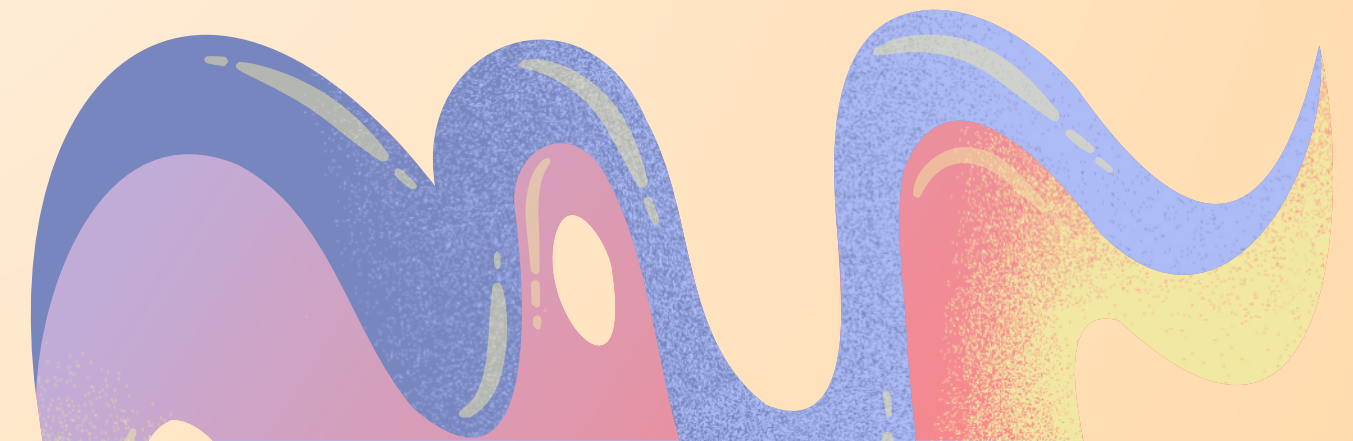
2) GOUTTIÈRE NEURALE (J20)

- 1) EPIBLASTE II
- 2) GOUTTIÈRE NEURALE
- 3) CELLULES DES CRÊTES NEURALES

3) TUBE NEURAL (J22)

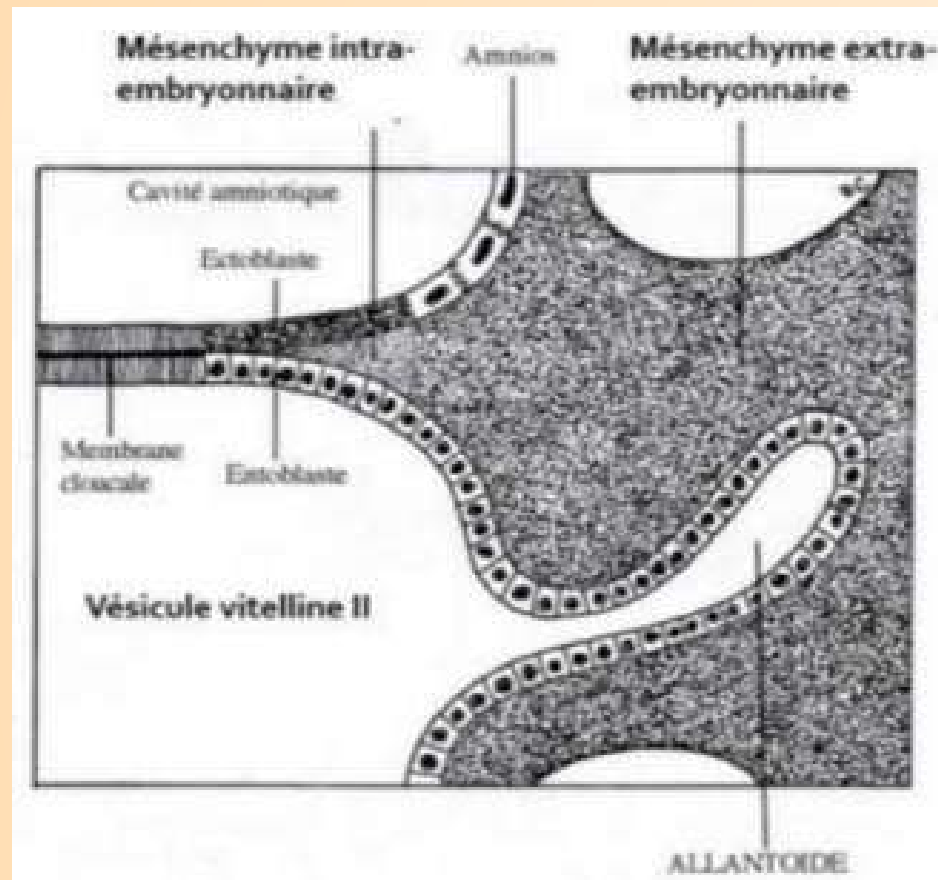
1) PLAQUE NEURALE (J19)

- 1) EPIBLASTE II
- 2) PLAQUE NEURALE (NEURECTOBLASTE)
- 3) CELLULES DES CRÊTES NEURALES

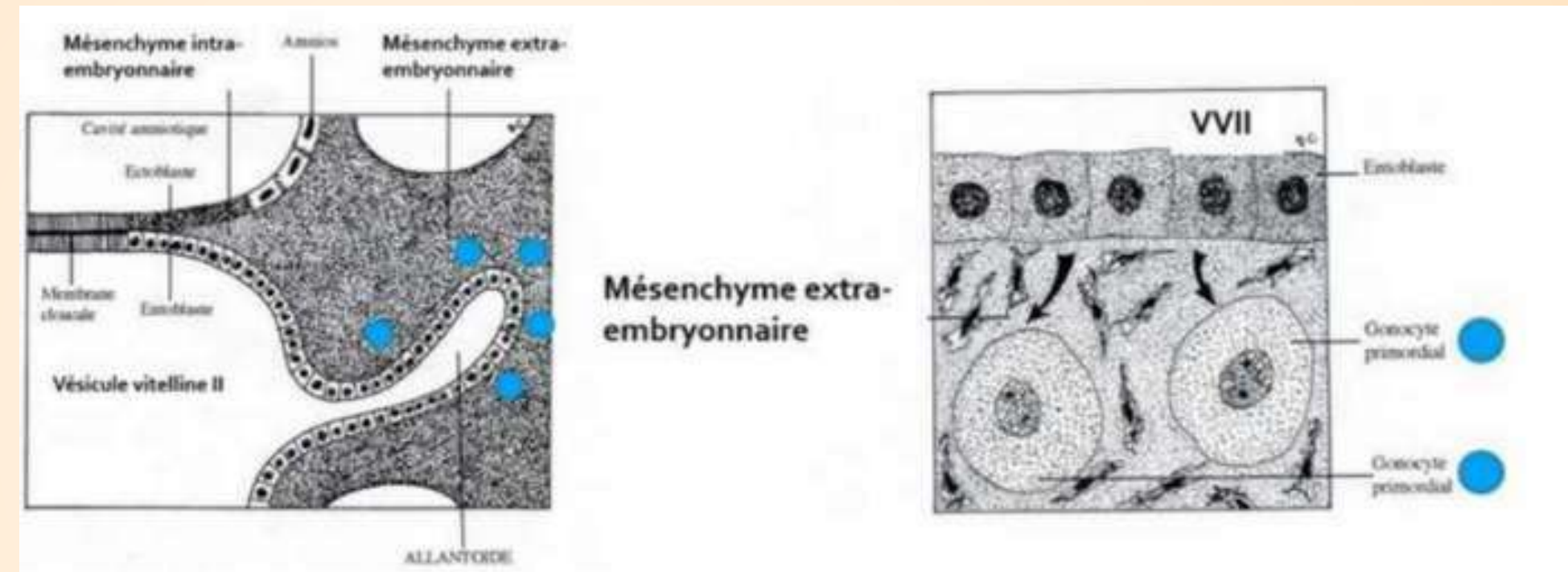


ANNEXES DE LA S3

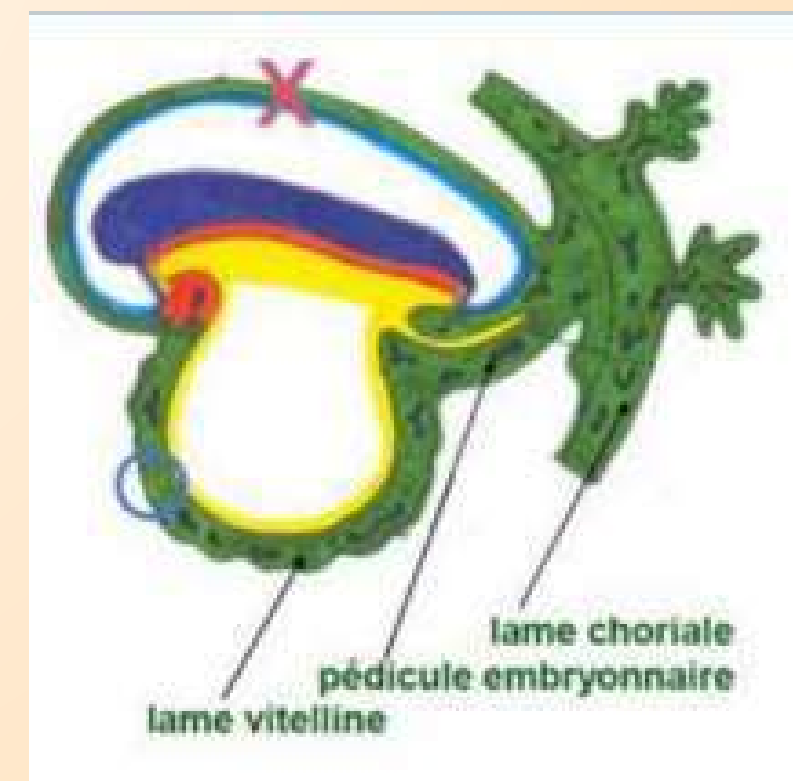
ALLANTOÏDE (J16)



GONOCYTES PRIMORDIAUX (J18)



ILOTS ANGIOFORMATEURS DE WOLFF & PANDER



SEMAINE 4 & DÉLIMITATION

- PÉDICULE VITELLIN : CANAL VITELLIN (PARTIE INTERMÉDIAIRE) + VV + MEE
 - PÉDICULE EMBRYONNAIRE : ALLANTOÏDE + VAISSEAUX + MEE
- +
=
CORDON OMBILICAL

CONSÉQUENCES DES PLICATURES

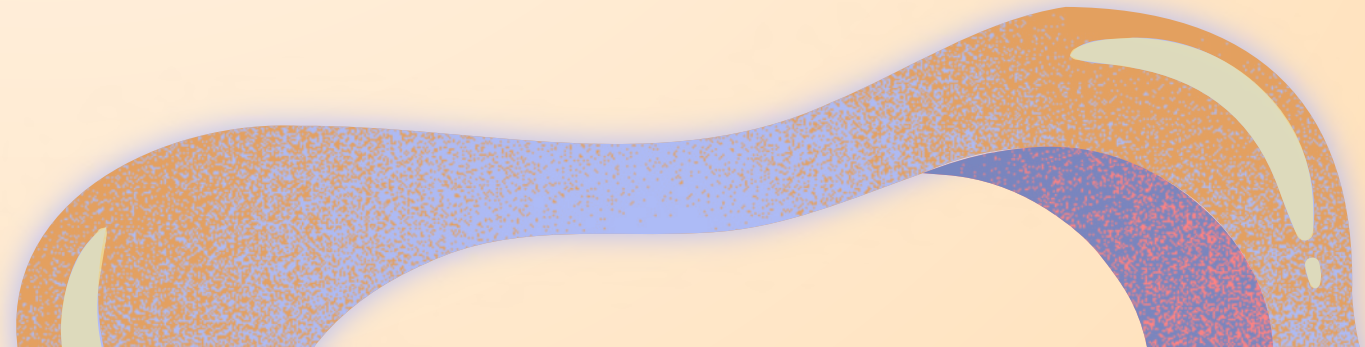
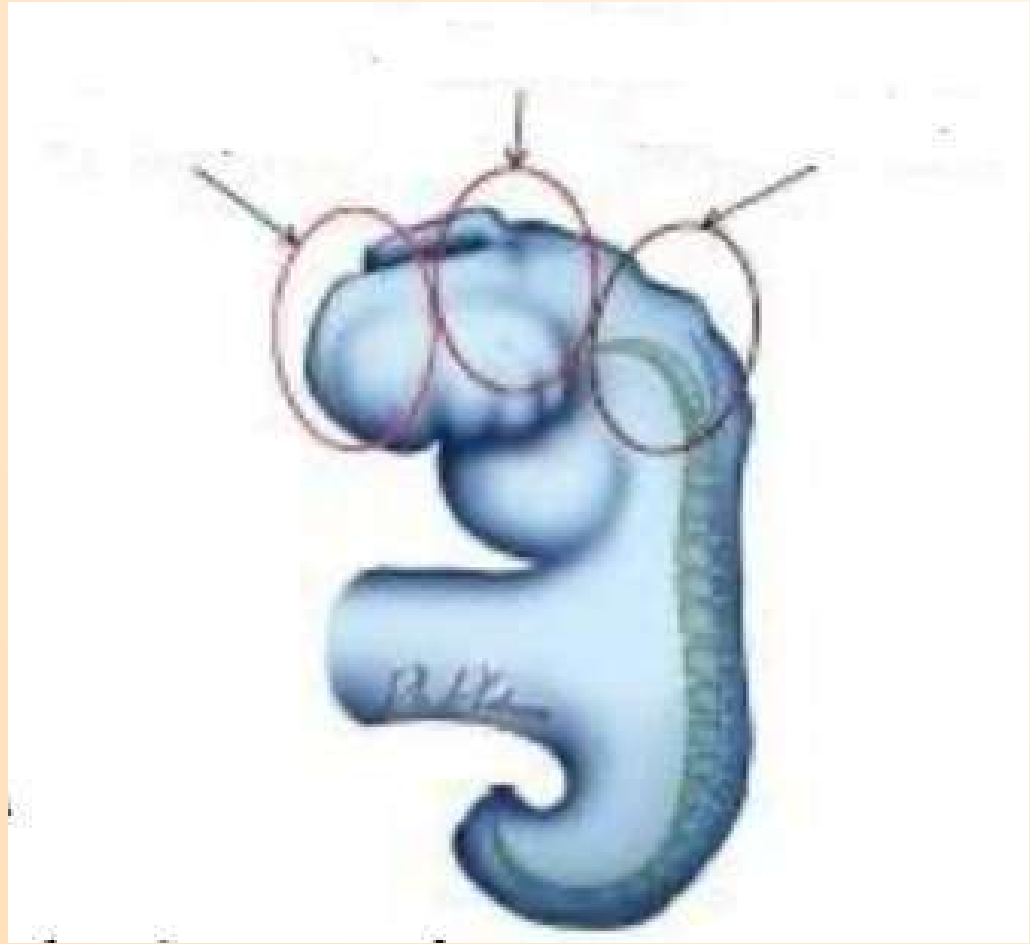
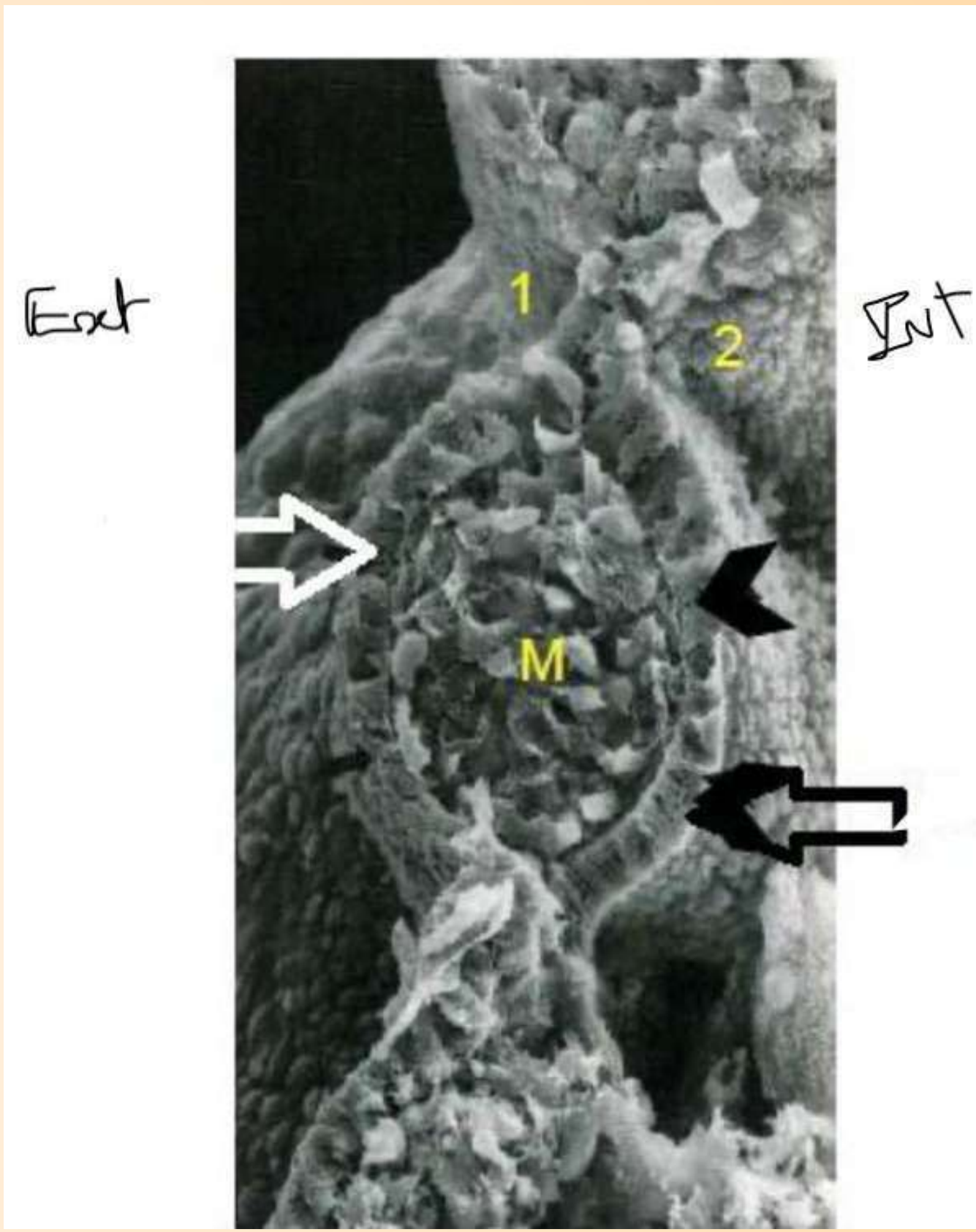
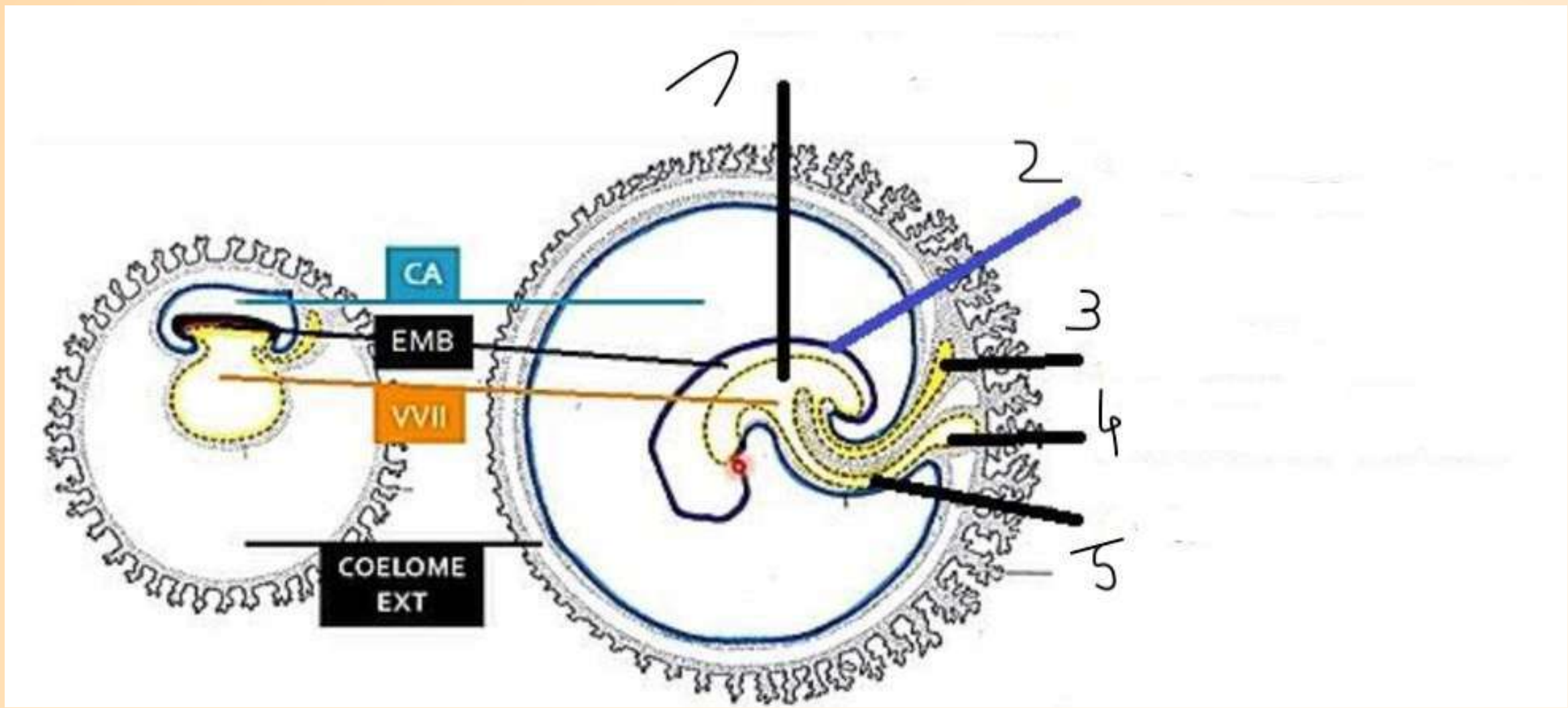
• VVII :

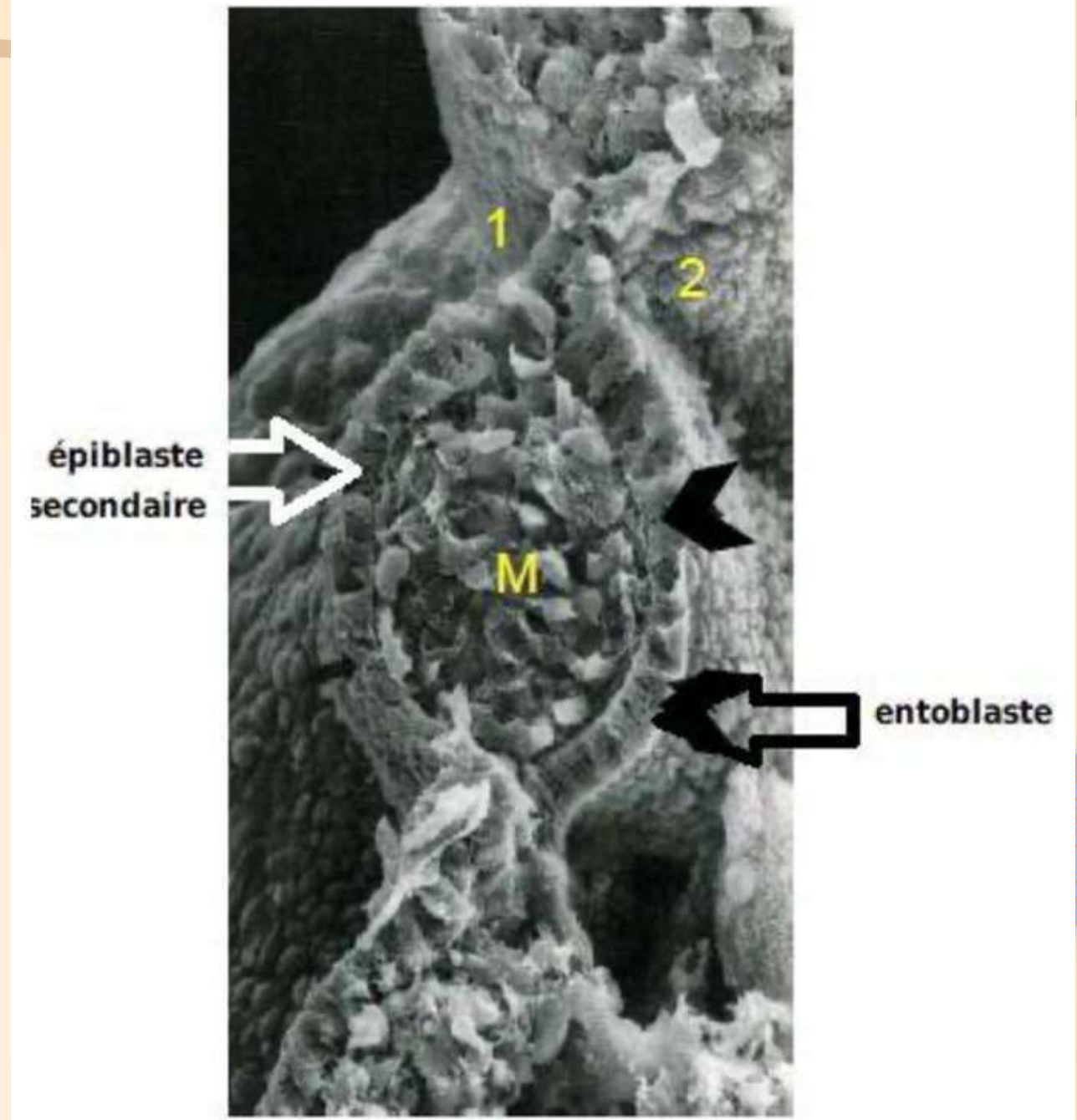
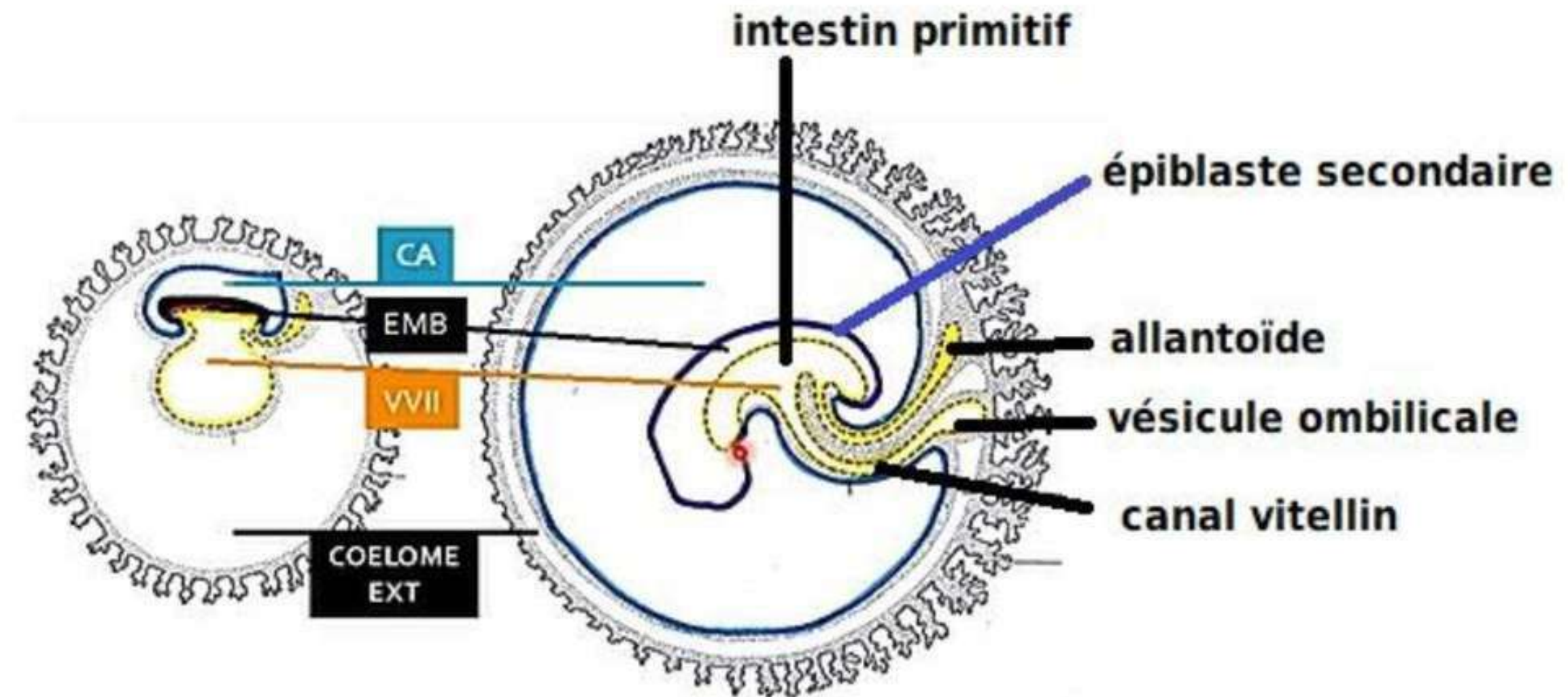
- PARTIE APICALE : INTESTIN PRIMITIF
- INTERMÉDIAIRE : CANAL VITELLIN
- PARTIE RESTANTE : VÉSICULE OMBILICALE (2/3 INF)

• CA :

- DISPARITION DU COELOME EXTERNE
- FUSION PV ET PD -> CORDON OMBILICAL

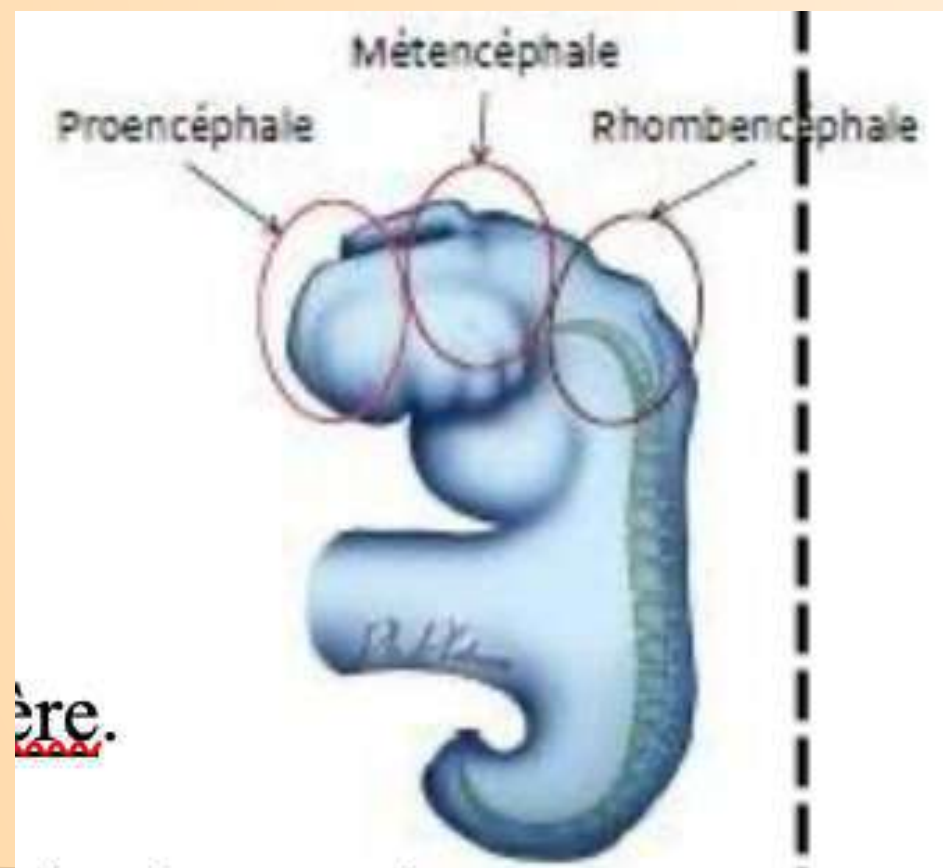






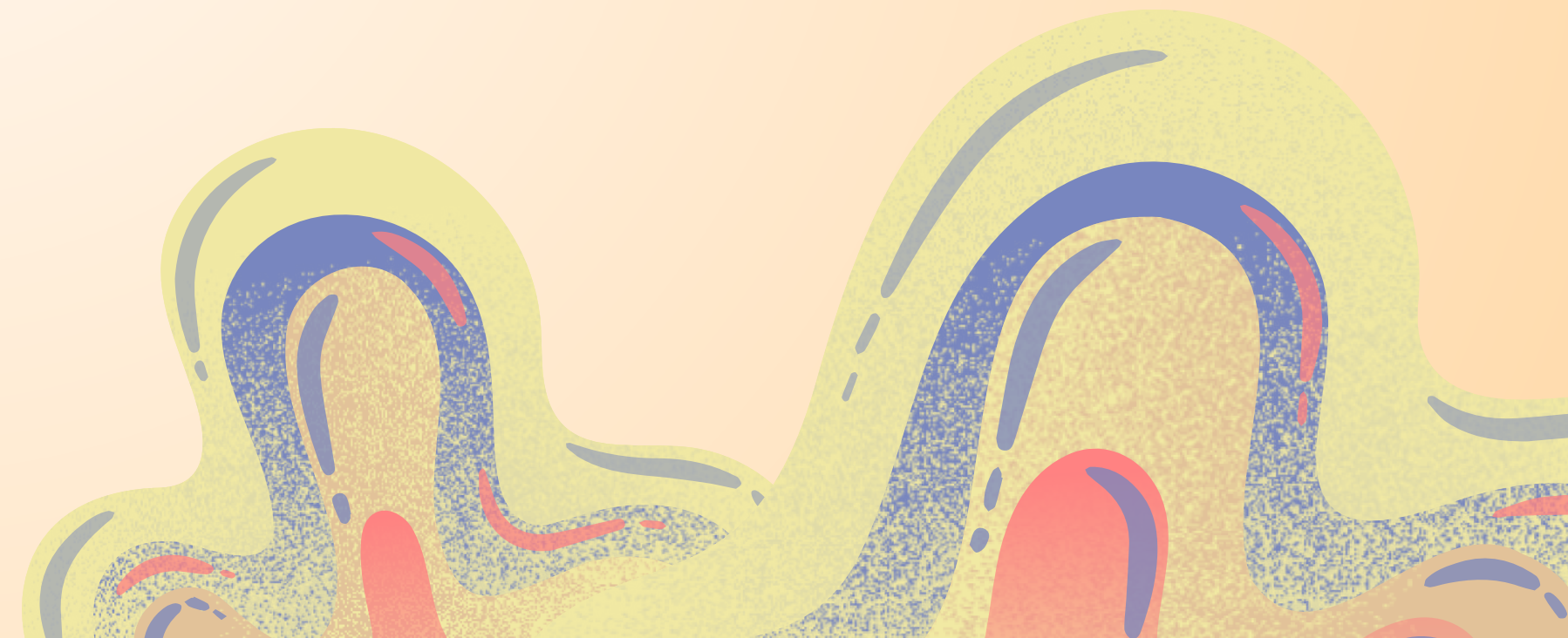
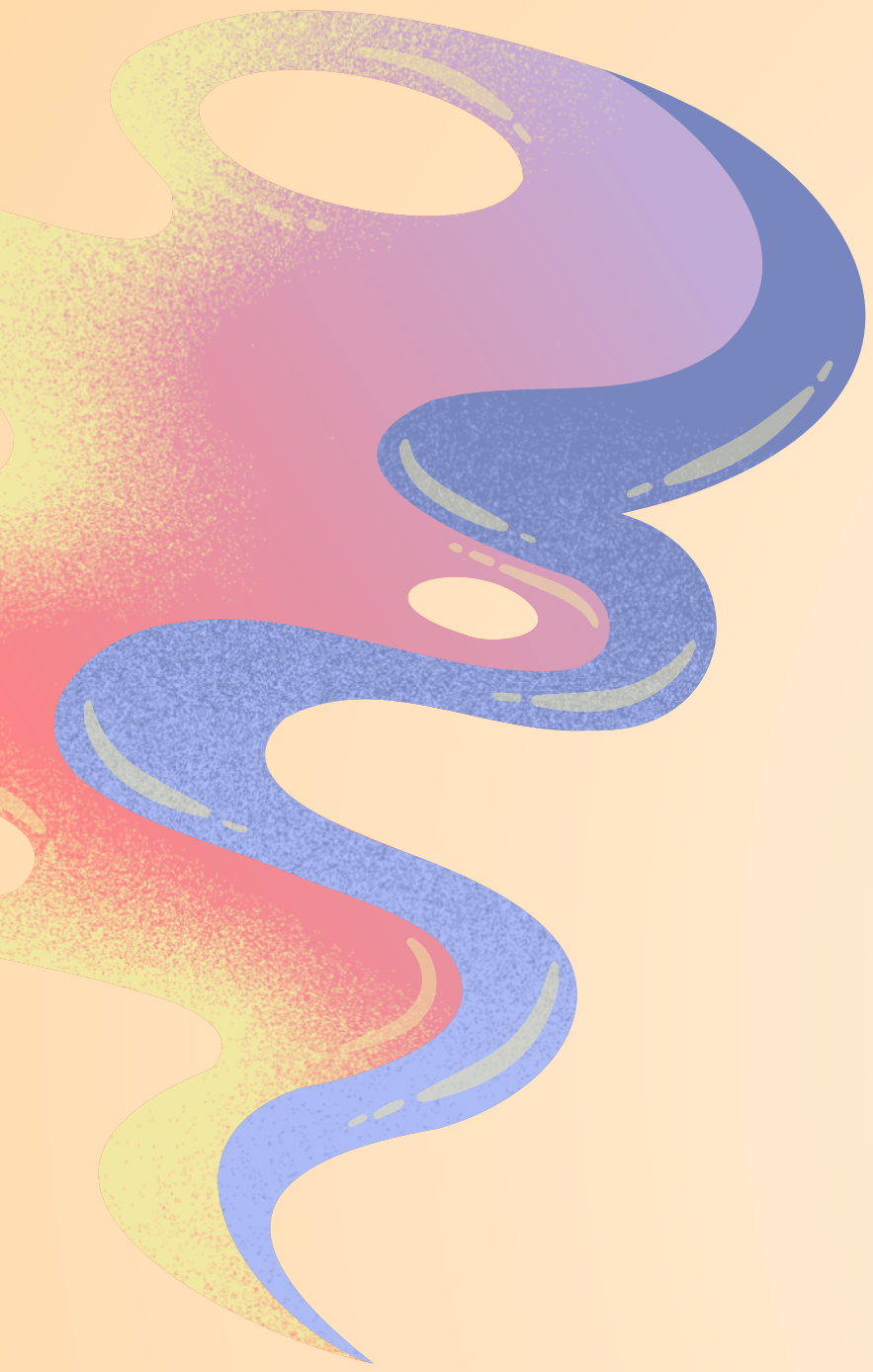
PARTIE CRANIÂLE NEURECTOBLASTE
ZONES PLUS DILATÉES

ARCS BRANCHIAUX / PHARYNGIENS
M = MÉSENCHYME (INTRA-EMBRYO)



FAQ

AVEZ-VOUS DES
QUESTIONS ?



MERCI DE VOTRE ATTENTION !

BY EMMA, MATHYS & MILIEN