Revision Lecture 2

Describe the development of the placental villi

Which of the following statement(s) is correct:

A: The placenta produces hCG to support the corpus luteum

B: The placenta consist of only maternally-derived tissue

C: The placenta functions as barrier, in metabolism, and in hormone production

D: The placenta consists of only embryonic derived tissue

Which are the 4 (5) major neural crest contributions?

Which of the following is/are not derived from the neural crest?

A: Enteric nervous system

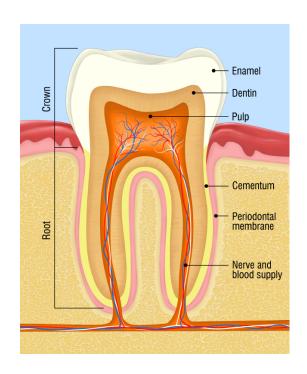
B: Ameloblasts

C: Central nervous system

D: Melanocytes

E: Adrenal medulla

Describe the development of an odontoblast from the zygote stage onwards



Describe early renal development starting from early post-gastrulation

Which of the following statements is/are correct?

A: The pronephros acts as the embryonic kidney

B: The adult kidney develops largely from the metanephros

C: The mesonephros contributes to the development of the adult kidney

D: The ureteric bud sprouts from the paramesonephric duct

E: The urogenital sinus has an ectodermal lining

Describe the bipotential gonad cells

Which of the following statements is/are correct?

A: SRY is the female sex determining gene, located on the X chromosome

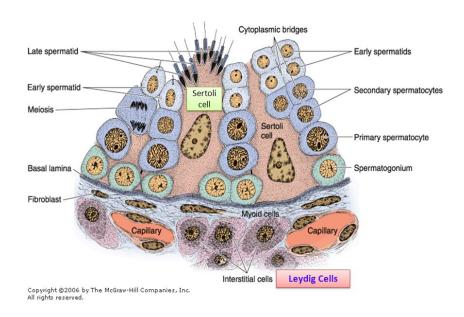
B: SRY activates expression of SOX9, which is a male sex determining gene

C: SOX9 activates AMH production, which results in regression of the mesonephric duct

D: Fetal Leydig cells produce testosterone, which is important for development of the Wolffian duct

E: Theca cells are the supporting cells of the ovary

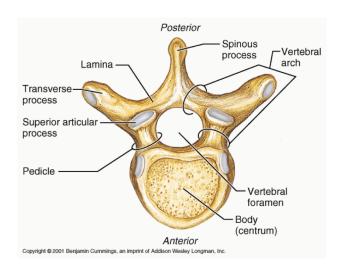
Describe the development of a Sertoli cell from the zygote stage onwards



Describe the development of the pituitary

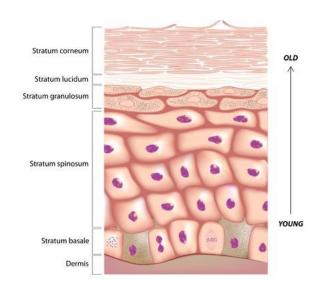
Discuss the types of ossification, and explain the differences

Describe the development of an vertebral chondroblast from the zygote stage onwards



Describe the process of epidermal appendage development

Describe the development of a keratinocyte from the zygote stage onwards



Describe the development of an ameloblast from the zygote stage onwards

