Animal development

Ch 47

Cytoplasmic determinants: (**Fig 21.11a**)

Location:

Cell differentiation:

Morphogenesis:

Fertilization: (**Fig 47.3**)

 Acrosomal reaction:

 Acrosome:

 Acrosomal process:

 Fusion:

 Entry:

 Depolarization of egg:

 Fertilization:

Cortical reaction: (**Fig 47.4**)

 Result:

Time line: (**Fig 47.5**)

Fertilization in mammals: (**Fig 47.6**)

Cleavage (**Fig 47.7**)

 Polar egg:

 Vegetal pole:

 Animal pole:

 Rapid mitosis

 Morula:

 Blastula:

 Blastoceol:

 Gastrula:

Three body axis: (**Fig 47.8**)

 Gray crescent:

 (**Fig 47.9**)

Chicken (**Fig 47.10**)

 Egg cell

 Cleavage:

 Meroblastic cleavage:

 Holoblasitic cleavage:

 Blastoderm:

 Epiblast:

 Hypoblast:

(**Fig 47.12**)

Gastrulation:

 Gastrula:

 Dorsal lip:

 Germ layers:

 Endoderm:

 Mesoderm:

 Ectoderm:

 Archenteron:

 Blastopore:

 Yolk plug:

Organogenesis: (**Fig 47.14**)

 Germ layers

 Notochord:

 Neural plate:

 Neural crest:

 Somites:

Ammonites:

 Shelled egg: (**Fig 47.17**)

 Extraembryonic membranes:

 Amnion:

 Allantois:

 Chorion:

 Yolk sac:

Early mammalian development

 Gastrulation

 Early organiogenesis

 Human:

 Blastocyst:

 Blastocoel:

 Inner cell mass:

 Trophoblast:

Implantation:

 Blastocyst

 Hypoblast

 Epiblast

 Amnion:

 Amniotic cavity:

 Amniotic fluid:

 Chorion:

 Yolk sac:

Gastrulation:

 Allantois:

 Umbilical cord:

 Ectoderm:

 Mesoderm:

 Endoderm: