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: