**10th Grade Biology Quiz #3 – Study Guide**

**Know the following terms and processes. It is more important that you have a picture of the events rather than a memorized definition of every term.**

**Implantation**

**Neurulation**

How does the process of neurulation give rise to the following structures?

Notocord

Neural Folds

Neural Grooves

Neural Tube

Somites

What are the functions of each structure? What do they give rise to?

How do each of the following components arise in this process?

Describe the aspects of differentiation occurring.

What is the function and fate of each component?

Tropohoblast

Cytotrophoblast

Syncytiotrophoblast

Embryoblast

Hypoblast

Epiblast

Uterine Lining/Endometrium

Uterine Glands

Yolk Sac

Amniotic Cavity

Chorion

Uterine Glands

**Gastrulation**

The Primary Germ Layers

How do these three primary germ layers come into being?

Invagination – Primitive Streak

Ectoderm, Mesoderm, Endoderm – What does each germ layer give rise to?

Transverse Folding

Describe/show how this folding process generates the gut tube and brings all three germ

layers into their proper relationship.

Cephalocaudal Folding

Describe/show how this folding process generates the head and tail structures of the

embryo.

Formation of the extra embryonic membranes

What are the extra embryonic membranes? What are their functions?

Be able to identify them on a diagram .

Yolk Sac: The Site of Early Blood Cell and Blood Vessels

Connecting Stalk/Umbilical Cord

Amnion

Chorion/Placenta

Chorionic Villus

**Homology**

What is homology? Contrast homology with analogy.

Be able to describe examples of homologous structures and point out why they are homologous.