



## UNIT FIVE STUDENT GLOSSARY

**Adenovirus** – A reprogrammed DNA virus that does not insert its genetic material into the host cell's DNA, instead it inserts a specifically created strand of recombinant DNA or protein.

**Blastocyst** – An early stage embryo characterized by a round, largely hollow structure. The outer layer is destined to become the placenta while the inner cell mass is destined to become the organism. The cells of the inner layer mass are pluripotent.

**Differentiation** – The process where an immature cell becomes specialized and transforms into a mature somatic cell.

**Fibroblast** – The most common cell type in connective tissue, fibroblasts form the structural framework of tissues. Scientists are able to isolate Hematopoietic stem cells – Adult stem cells located in bone marrow that produce blood and immune cells.

**Heterozygous** – An individual organism having two differing copies of the same gene, often one normal and one mutated gene.

**Homozygous** – An individual organism having the two identical copies of the same gene, usually either both normal or both mutated.

**Plasmids** – Small circular pieces of DNA that are separate from chromosomal DNA.

**Pluripotency** – The ability of a stem cell to differentiate into all the mature adult cells in the body.