



UNIT ONE Student Glossary:

Blastocyst: a hollow ball of cells 5-14 days old containing an inner cell mass made of embryonic stem cells

Asymmetric division: produces two daughter cells with different properties

Differentiates: when a cell matures and becomes more specialized

Embryonic stem cells: the small clump of cells (inner cell mass) inside the blastocyst that develops into the organism

In Vitro Fertilization (IVF): a procedure that couples may use when one or both of the partners are diagnosed with infertility; to create an embryo in a test tube

Pluripotent: cells that have the potential to specialize into every mature cell type in the adult *but that cannot form the placenta*

Preimplantation Genetic Diagnosis (PGD): where one blastomere (cell) is removed and its DNA tested for identifiable genetic disorders or chromosome abnormalities for the purpose of embryo selection

Self-renews: after cell division, one of the resulting stem cells remains the same kind of cell it was before division, with the same potential (the other daughter cell differentiates, it does not stay the same.)

Totipotent: cells that have the potential to become ALL types of cells in the mature adult *and* the trophoblast (placental) cells