UNIT ONE Teacher Glossary:

Aneuploidy: having a chromosome number that is not a multiple of the haploid number; an abnormal number of chromosomes
Antral: a cavity or chamber
Asymmetric division: produces two daughter cells with different properties
Autosomal: A chromosome that is not a sex chromosome
Blastocyst: hollow ball of cells containing an inner cell mass
Blastomere: any cell produced during cleavage
Cytokines: small molecules that cause an inflammatory response
Differentiates: the cell becomes more specialized
DNA gel electrophoresis: a technique used to separate DNA, RNA, and protein
Ectopic: pregnancy occurring in an abnormal position or place that usually terminates
Embryonic stem cells: the inner cell mass of the blastocyst
Exogenous: derived externally
Fluorescence In Situ Hybridization (FISH): technique used to detect and localize the presence or absence of specific DNA sequences on chromosomes
Gastrulation: formation of a gastrula (the stage following the blastula); cells move to form the three germ layers from which all organs develop
Gonadotropins: follicle-stimulating hormone necessary for reproductive development
Haploid: single set of chromosomes, i.e. half the normal diploid number
Heteroduplex analysis: electron microscope observation of duplex DNA formed by strands from different sources
Intracytoplasmic Sperm Injection (ICSI): an in vitro fertilization procedure in which a single sperm is injected directly into an egg
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
Morphology: the study of form and structure of organisms
Morula: embryonic stage when it is a ball of eight cells
Neurodegenerative: relating to the degeneration of nervous tissue
Pluripotent: cells that have the potential to specialize into every mature cell type in the adult but that can no longer form the placenta
Preimplantation Genetic Diagnosis (PGD): where one blastomere (cell) is removed and its DNA tested for identifiable genetic disorders or chromosome abnormalities
Progesterone: a hormone that prepares the uterus for the fertilized ovum and maintains pregnancy
Self-renews: remains the same kind of cell it began as before division
Subcutaneous: performed or introduced under the skin
Totipotent: cells that have the potential to become ALL types of cells in the mature adult and the trophoblast (placental) cells
Translocation: rearrangement of parts between genetically different chromosomes
Trophoblast (or trophectoderm): the outside layer of the blastocyst that eventually becomes the placenta and extra-embryonic tissues
Zygote: fertilized egg