



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 trophoctoderm): the outside layer of the blastocyst that eventually becomes the placenta and extra-embryonic tissues

Zygote: fertilized egg