Biotechnology Vocabulary:

1. **Human genome project** = the mapping and sequencing of all the genes in the human genome

1. **Genetic engineering** = (biotechnology) manipulating DNA

1. **Recombinant DNA** = refers to the DNA containing segments from two different organisms

1. **Transgenic organisms** = organisms that contain functional recombinant DNA from more than one source (organisms containing recombinant DNA)

1. **Restriction enzyme** = bacterial enzymes that cut specific sequences of DNA
2. **Sticky ends =** Fragments of DNA that has been cut with restriction enzymes have unpaired nucleotides at the ends

1. **Vector =** carries foreign DNA into host cell

1. **Plasmid =** small ring of DNA in a bacterium **–** often used as a vector

1. **Gene therapy =** A "normal" gene is inserted into the genome to replace an "abnormal," disease causing gene

1. **Gene splicing** = Rejoining cut fragments of DNA

1. **Gene cloning** = Creating genetically IDENTICAL copies

1. **Genetically modified organisms** = organisms with artificially altered DNA
2. **Stem cell =** an undifferentiated cell often used in research because it is capable of giving rise to any cell type