**Insert new genes**

**Replacement of genes (recombination)**

**Removal of genes**

**Mutation of existing genes**

**Genetic Engineering**

**Methods to modify genes**

**Creates genetically modified organisms (GMOs)**

**Use of GM bacteria**

**To produce hydrocarbons, fuels, plastics, drugs**

**Use of GM plants**

**To produce disease- and insect-resistant crops, edible vaccines, larger crops**

**Use of GM animals**

**To track protein production, for disease detection,   
to produce larger animal as food source**