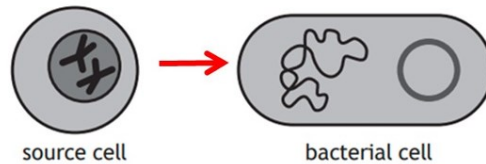


Genetic Engineering

Genetic Engineering Definition

Genetic information transferred from one cell to another.



Examples of Genetic Engineering

Production of human medicines

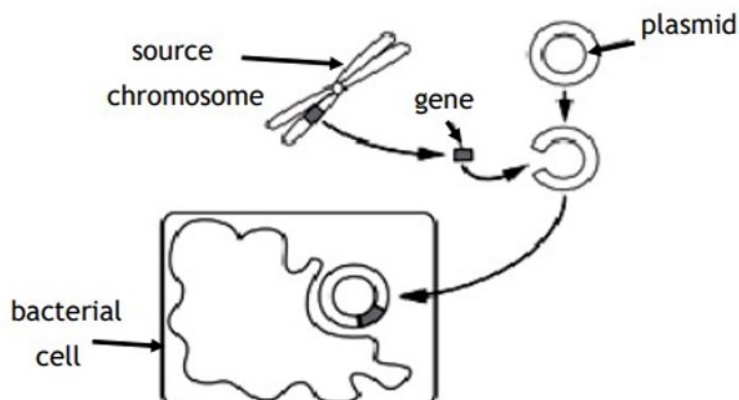
1. Insulin
2. Human Growth Hormone

Genetically Modified (GM) Organisms

1. Tomato with longer shelf life.
2. Potatoes with disease resistance.
3. Bird resistance to Bird flu.

Stages of Genetic Engineering

1. Identify section of DNA that contains required gene from source chromosome.
2. Extract required gene using an **ENZYME**.
3. Extract plasmid from bacterial cell & cut open using an **ENZYME**.
4. Insert required gene into bacterial plasmid using an **ENZYME**.
5. Insert plasmid into host bacterial cell to produce a (GM) organism.



Genetic Engineering

Genetic Engineering Flowchart

