

3 Biotechnology

What You'll Learn:

Evaluate the importance of advances in genetics.

Sequence the steps in making genetically engineered organisms.

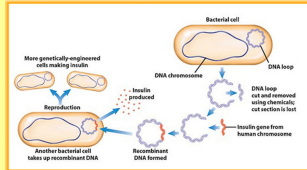
Genetic Engineering

*Changes the arrangement of DNA.



Recombinant DNA

*It is made by inserting useful DNA into bacteria.

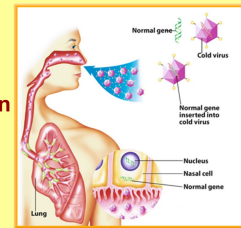


*This method is used to produce human insulin, human growth hormone, and other chemicals by bacteria.

Gene Therapy

*A normal allele is placed in a virus.

*Virus delivers the normal allele and replaces the defective one when it infects the cell.



*Gene therapy might be a method of curing several genetic disorders in the future

Genetically Engineered Plants

*Selecting plants with desired traits to breed for the next generation.

*It improves crop yield and reduces risk of disease.

*Scientists also take traits from one plant and insert it into other plants.

