Unit 8- Biotechnology

You will work to understand the techniques used in DNA technology and their uses as well as the potential societal and ecological consequences.

**State Standards**:

**Bio.3.3.2** Summarize how transgenic organisms are engineered to benefit society.

**Bio.3.3.3** Evaluation some of the ethical issues surrounding the use of DNA technology (including cloning, genetically modified organisms, stem cell research, and Human Genome Project)



**You will be able to:**

* Explain how transgenic organisms are created and their benefits/risks.
* Discuss the ethics of DNA technology from a scientific perspective
* Describe the potential consequences of these technologies

**Essential Question(s):**

What is genetic engineering exactly?

What are some of the most recent breakthroughs in DNA technology?

 How does DNA technology apply to previous units?

**Unit Vocabulary**

1. Transgenic Organism

1. Genetically Modified Organism
2. Gel Electrophoresis
3. Polymerase Chain Reaction
4. Plasmid
5. Human Genome Project
6. Gene Therapy
7. Restriction Enzyme
8. Bacteriophage
9. CRISPR