

There are many different methods to genetically modifying organisms. These methods may include the use of viruses, radiation, gene guns, bacterial transformations, and many more. Regardless of the method used, each organism is chosen for a specific reason and its genome is altered in a specific way.



In some cases genes from a fish are added to tomato plants. In other cases, genes from a jellyfish are added to mice. Whatever the case, genetic modification is done in the hopes of learning something new, advancing a field of study, or developing solution to a problem.

Your assignment is to research a genetically modified organism and to create a **single-spaced, 1 page in length, summary** of a GMO of your choice.

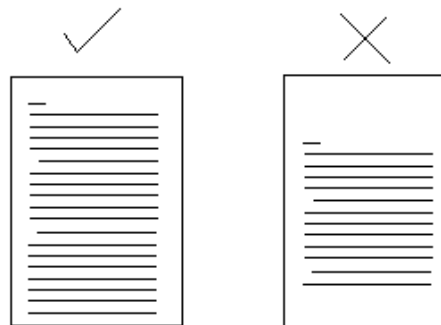
This GMO must be real!!! (Or in the process of being created)

Your paper MUST include:

- The name of the GMO
- The two or more organisms used in its creation
- A summary of the goals of this GMO
 - What did researchers hope to achieve?
- The gene names involved (if applicable)
 - Where are they from?
- The technique/method used for the genetic modification
 - A short summary of this process
 - This may require you to Google the technique and look up definitions
- Has the company/researchers performed any tests on this GMO? If so, what tests?

- Background on the company/researchers (if available)
 - Other studies, projects, etc
- How does the public perceive this GMO? (if applicable)
- What is your opinion of this GMO?
- What are some ways this GMO could be used to benefit society?
- Could this genetic modification be utilized in other organisms or for other reasons?
- A print out of the first page of 1 article you use
- **Site your Sources** in a bibliography

You may find that some of the questions/topics your paper MUST include cannot be found or do not exist as of yet. If this occurs, the paper must still be at least **1 page in length**. I would suggest expanding and elaborating on other points in order to achieve the 1 page minimum. You may include other points of discussion in your paper.



These GMOs do not have to be any specific organism, there are many GMOs out there ranging anywhere from bacteria to mammals. A few examples are listed below:

Land Mine Detecting plants

Danish scientists have made a scientific discovery with significant humanitarian and environmental potential. They have shown that it is possible to produce plants which change colour in the presence of specific compounds within the soil, opening the way for the first bomb and land-mine detection plant.

See-through frog / transparent frog

Japanese researchers [have developed a frog](#) (video) with skin so transparent that its internal organs are visible. More than a boon to squeamish students, the see-through frog could aid biologists studying how organs develop and respond to tumors or toxins.

Glofish

In 1999, Dr. Zhiyuan Gong and his colleagues at the [National University of Singapore](#) were working with a gene that encodes the [green fluorescent protein](#) (GFP), originally extracted from a [jellyfish](#), that naturally produced bright green [fluorescence](#). They inserted the gene into a zebrafish embryo, allowing it to integrate into the zebrafish's [genome](#), which caused the fish to be brightly fluorescent under both natural white light and ultraviolet light. Their goal was to develop a fish that could detect [pollution](#) by selectively fluorescing in the presence of [environmental](#) toxins.