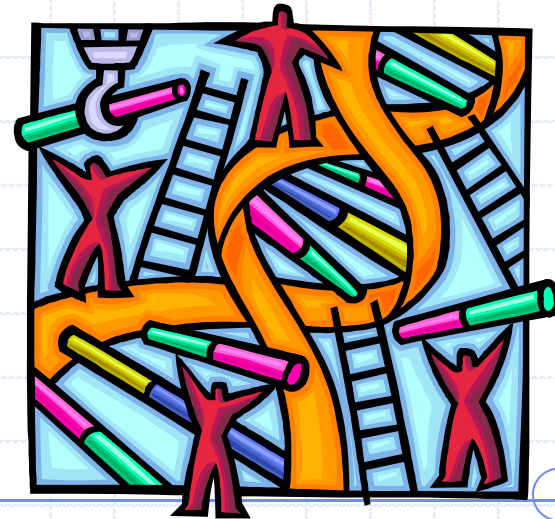
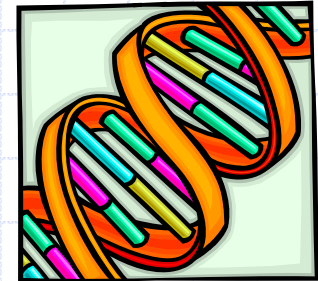


Designer Genes: One Size Fits All?



Imagine You Are a Geneticist

- ◆ You specialize in genetic engineering in agriculture.
- ◆ You have agreed to provide expert advice to people with a terrible problem.
- ◆ Pack your bags for Mexico.



The Problem

- ◆ Corn weevils have infested the corn of Ixtapa, Mexico, severely reducing the major source of food.
- ◆ Malnutrition is a real concern.
- ◆ Employment and the related economy are suffering, as well.



A Possible Solution

- ◆ The Wvbgone Company has a promising strain of weevil-resistant corn in development in the United States.
- ◆ The corn has been genetically engineered.



The Issues

- ◆ Should Wvbgone Corn be planted in Ixtapa? Should this research be pursued?
 - To understand, you must be able to answer the following:
 - ◆ What traits have been genetically engineered into corn and why?
 - ◆ What are some of the benefits and risks to genetic engineering? (health, environmental, ecological, and social)
 - ◆ Should genetic engineering be permitted in our society?
 - ◆ Do the benefits of genetically engineered foods outweigh the risks?
- ◆ You have agreed to study the issues and develop recommendations for the district council of Ixtapa.

Your Steps

- ◆ Meet and confer with your fellow scientists.
- ◆ Discuss the issues.
- ◆ Focus on the following guiding questions:
 - ◆ What traits have been genetically engineered into corn and why?
 - ◆ What are some of the benefits and risks to genetic engineering? (health, environmental, ecological, and social)
 - ◆ Should genetic engineering be permitted in our society?
 - ◆ Do the benefits of genetically engineered foods outweigh the risks?
- ◆ Complete your research.
- ◆ Present your report orally for the district council.

Research Report

- ◆ An overview of genetic engineering in agriculture.
- ◆ A supported investigation of the social, ethical, and monetary issues around the benefits and risks of GE agriculture, especially related to the concerns of Ixtapa.
- ◆ Your recommendations for the district council.

Requirement Checklist

- ✓ Research report outline
- ✓ Research proof turned in
- ✓ District council report completed (graded)
- ✓ Multimedia presentation proposal
- ✓ Multimedia presentation with a slideshow, Web site, or newsletter support (graded)



Research Proof

- ✓ Consult 10 different sources. Choose from the following:
 - 10 highlighted pages
 - Highlight key ideas and phrases only
 - Cite sources
 - 50 notecards
 - Follow guidelines in your research book
 - Cite sources
 - A combination of cards and highlighted pages

Multimedia Element

- ◆ Which would best help enhance understanding of your research results—slideshow, Web site, or newsletter?
- ◆ What are the expectations for the selected format?
- ◆ Review the assessment scoring guide for the selected choice.

Submit a Presentation Proposal

- ◆ Names of students in the group
- ◆ Presentation format
- ◆ Storyboard
- ◆ Ideas for an interesting introduction and conclusion



Presentation Preparation

- ◆ Technical aspects—be sure your slideshow or Web site is in working order or you have enough copies of your newsletter to distribute.
- ◆ Practice.
 - ◆ Be sure to use a smooth, lively delivery that is loud enough.
 - ◆ Eye contact and movement are essential.
 - ◆ Do you have an effective introduction and conclusion?

Don't Forget Your Bibliography

- ◆ Include all your required sources
- ◆ Use the correct format
 - Alphabetical order
 - Indenting
 - Complete citations