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1 The Role of Genetic Engineering

genetic engineering

medical

Genetic Engineering: What's It For?

All living things have genes. And now scientists can **modify** them. **Genetic engineering** allows scientists to **manipulate** DNA. This field has many **applications**.

Genetic engineering has many **medical** uses. Genetic engineers are **developing** treatments for serious diseases. Often, this occurs with genetically-modified (GM) mice and pigs. These animals have similar genes to humans. So diseases affect them in similar ways.

Scientists are also **researching** GM bacteria. This has **industrial** applications. The bacteria can fuel machines. And it can clean up toxic chemicals, such as oil.

The **agricultural** industry uses genetic engineering, too. GM crops resist disease, drought, and even insect damage. Farmers can raise **pharmaceutical** crops, too. These modified plants produce important proteins and antibiotics.

agricultural

industrial

research

pharmaceutical

Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are some medical uses for genetic engineering?
- 2 What are some other uses for genetic engineering?

Reading

2 Read the article. Then, complete the table.

GM Organism	Use
Mice and pigs	1 _____
Bacteria	2 _____
Crops	3 _____

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

- | | |
|--------------|---------------------|
| 1 __ modify | 4 __ industrial |
| 2 __ develop | 5 __ agricultural |
| 3 __ medical | 6 __ pharmaceutical |

- A related to the treatment of illnesses and injuries
- B related to manufacturing activities
- C to create something or a way to do something
- D related to the process of creating drugs for medical conditions
- E related to the process of farming
- F to alter something