

Name _____

Genetic Engineering: Unleashing the Power and Perils of Science

Open-Ended Response Answer Key

1. Genetic engineering can revolutionize agriculture by creating stronger and pest-resistant crops, reducing the need for harmful chemicals, and potentially increasing food production to meet the demands of a growing population.
2. Genetic engineering can be used responsibly by implementing strict ethical guidelines and regulations, engaging in open and transparent discussions, and prioritizing the well-being of both humanity and the environment in all genetic engineering endeavors.
3. Altering the genetic makeup of future generations could have long-term and unpredictable consequences, including unintended genetic mutations, ethical dilemmas, and potential societal inequalities arising from genetic modifications.
4. "De-extinction" refers to the process of bringing back extinct species through genetic engineering. Its potential benefits include restoring biodiversity and preserving ecosystems, but drawbacks may include unforeseen ecological impacts and ethical concerns about meddling with nature.

