



Article Guide: How CRISPR/Cas9 is revolutionizing gene editing

<http://scienceovereverything.com/2017/09/13/crisprcas9-gene-editing/>

As you read each paragraph:

- Vocabulary – Box vocabulary words or words that you have not seen before
- Focus Questions – Underline in the text where these questions are as you read

Introduction paragraph:

1. What breakthrough did scientists recently make that could lead to modifying the human genome?

What is CRISPR/Cas9?

2. What is the difference between CRISPR and Cas9?

3. How does Cas9 help protect bacteria from viruses?

4. How are scientists using CRISPR/Cas9 to edit genes?

Exciting Possibilities

5. What about the CRISPR/Cas9 method as the potential to change the field of genetics?

6. What are some potential applications of CRISPR/Cas9?

Ethics Concerns

7. How could CRISPR/Cas9 be used in a way that is not ethical?

Discussion

CRISPR/Cas9 could potentially allow scientists to edit the genes of humans. How far should scientists go in their research? Should we only edit genes that causes diseases or should parents be allowed to design their children with the traits they want?

Vocabulary Guide

Gene	
Genome	
Genetic Engineering	
Embryo	
Enzyme	
DNA	
RNA	
Genetic disorder	
Mutation	