

Name _____ Date _____ Period ____

Greatest Discoveries: Genetic with Bill Nye

1. What is the first great discovery of genetics? _____

Mendel's factors are now called _____

2. What is the second great discovery of genetics? _____

Drosophila melanogaster is more commonly known as the _____

Why is it a good choice for genetics studies? _____

What is interesting about the white-eyed offspring? _____

3. What is the third great discovery of genetics? _____

Beadle and Tatum worked with what organism? _____

Irradiated spores failed to produce nutrients because _____

This breakthrough is known as the "One _____, One _____ Hypothesis"

4. What is the fourth great discovery of genetics? _____

Barbara McClintock worked with what organism? _____

A transposon is a gene that can do what? _____

5. What is the fifth great discovery of genetics? _____

A bacteriophage is made of what two main components? _____

Hershey and Chase used _____ to determine which of these components controlled heredity.

6. What is the sixth great discovery of genetics? _____

DNA is composed of four _____, which are _____

What was Rosalind Franklin's contribution to their work? _____

Watson and Crick were able to determine what? _____

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7. What is the seventh great discovery of genetics? _____

What is a triplet? _____

Marshal Nirenburg discovered that 3 bases in RNA code for what? _____

8. What is the eighth great discovery of genetics? _____

Hamilton Smith determined that restriction enzymes could do what? _____

9. Ninth Discovery: What is alternative splicing? _____

10. Tenth discovery: What is a minisatellite DNA? _____

11. Eleventh discovery: What is RNA interference? _____

12. 12th discovery: What is the genome? _____

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