Mutations

Name: _____ Date: _____

Vocabulary Words: Match the definition to each word.

1. There are wo main mechanisms of _____ as natural selection and mutations.
2. Every cell in our body contains coded _____ in the form of DNA, which acts like a library.
3. Mistakes or random changes that occur in genetic code are called _____.
4. Random changes to genetic material destroy _____ rather than adding to it.
5. Scientists tested genetic changes on _____ because they have a short lifecycle.

Word bank: DNA, Evolution, Fruit flies, Information, Mutations

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Multiple Choice: Choose the correct answer from the choices for each question.

1. What metaphor is used to describe the role of DNA in our cells?
   a) A hard drive storing temporary files
   b) A library of information containing plans
   c) A notebook that can easily be edited
   d) An electrical grid powering a city

2. Why did the speaker use the analogy of driving nails into a flash drive?
   a) To show how easy it is to upgrade
   b) To demonstrate that damage adds speed
   c) To illustrate how random damage destroys function rather than adding
   d) To explain how viruses replicate

3. What caused mutations in the fruit fly experiment?
   a) Extreme cold temperatures
   b) Chemical sprays
   c) Radiation added to the chambers
   d) High voltage electrical shocks

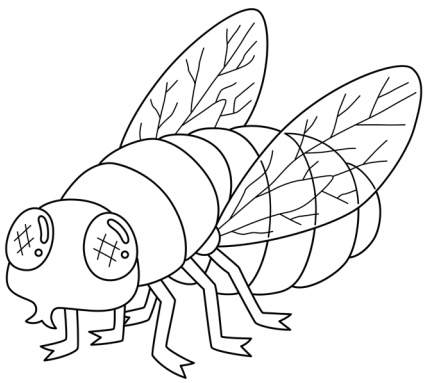
4. What was the primary result of the radiation experiments on the fruit flies?
   a) Evolved into new insects
   b) Gained double genetic code
   c) Most died, while others developed deformities
   d) Developed longer lifespans

Discussion & Reflection: Answer the following questions in complete sentences

1. Explain the argument regarding why mutations cannot explain how simple bacteria could evolve into a complex organism. _____

2. Describe why fruit flies are good subjects for studying genetic mutations across multiple generations. _____

3. This shows me that God is (Circle the word):

Wise Powerful Caring Creative All of the above

Explain your choice: