NI	1	m	0	٠
IN	u	m	e	٠

DNA, Chromosomes, and Genes

Directions: Use the website https://learn.genetics.utah.edu/content/basics/?nt=1 and complete the following questions.

WHAT IS A TRAIT?

- 1. What is a trait?
- 2. Give two examples of traits that are "easy to see," and two examples of traits that are "not easy to see."
- 3. How does the environment influence your traits? Give an example.

WHAT ARE DNA AND GENES?

- 4. What is found in the molecule DNA?
- 5. Draw a molecule of DNA. What four letters or "bases" are found in a DNA molecule?

6. What is a gene?

7. What causes each person to be unique?

8. Why are proteins important? What do they do?

WHAT IS INHERITANCE?

- 13. When living things reproduce, what do they pass to offspring?
- 14. How do offspring made through asexual reproduction compare to their parent genetically?
- 15. How many copies of each gene do you receive from your parents?
- 16. What do you think genetic variation is?

WHAT IS A MUTATION?

- 9. What is one cause for the differences in our genes?
- 10. What are two examples of "typos" that happen when DNA is being copied?
- 11. About how many new mutations (or variations) do we have that were not in our parent's DNA?
- 12. Are all mutations bad? Explain.