Name: Quang Huynh

*Modern Genetics Vocabulary*

Define the following terms dealing with Genetics:

1. Addition = The probability that any one of two or more events will happen by adding their individual probabilities together.

2. Adenine = A double ring purine base that is a component of nucleic acids, certain coenzymes, energy-carrying molecules like ATP, DNA and RNA. Forms a base pair with thymine in DNA.

3. Chromosome = A DNA molecule in the cell nucleus that contains some or all of the genetic material.

4. Cytosine = A single ring purine base that is a component of nucleic acids that carry hereditary information in DNA and RNA in cells. It is one of the four main bases found in DNA and RNA.

5. Deletion = A mutation in a section of DNA that gets lost or removed.

6. Deoxyribose = A five carbon sugar.

7. Double helix = A spiral staircase structure, is the shape of DNA molecules.

8. DNA = A self-replicating material found in all life forms and is the carrier of genetic information. DNA stands for deoxyribonucleic acid.

9. Gene = The basic unit of hereditary information made up of a specific nucleotide sequence in DNA.

10. Genetics = The study of heredity.

11. Guanine = A purine base that is one of the four main bases in DNA. It is a component of nucleic acids that carry hereditary information in DNA and RNA in cells.

12. Mutation = An alteration in the DNA structure or sequences of a gene. Heritable changes in genetic information.

13. Nucleic acid = The building blocks for nucleotides.

14. Nucleotide = The building units composed of DNA. It composed of the four base groups, a deoxyribose sugar and phosphate group.

15. Nucleus = Contains all of a cell’s chromosomes, which has the genetic material.

16. Ribosomes = A cellular particle made of RNA and protein that is the main area where protein synthesis occurs.

17. Thymine = A nitrogen base found in DNA and frequently pairs with adenine.

18. Variations = The natural genetic differences that occur between different organisms.