Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Unit 3 – Biotechnology

**Directions:** Read Unit 3 – Biotechnology on pages 48 – 58 and answer the following questions.

1. **MULTIPLE CHOICE**

\_\_\_\_ 1.) Bio means:

1. A study of.
2. Life.
3. Three.
4. Science.

\_\_\_\_ 2.) An example of a fermented food is:

1. Applesauce.
2. Bologna.
3. Cheese.
4. Coffee.

\_\_\_\_ 3.) The earliest method of livestock improvement was probably by:

1. Biotechnology.
2. Crossbreeding.
3. Gene splicing.
4. Selection.

\_\_\_\_ 4.) The person providing the foundation for scientific study of heredity was:

1. Gregor Johann Mendel
2. George Washington Carver
3. Joseph Glidden
4. Thomas Jefferson

\_\_\_\_ 5.) The genetic code of life is:

1. Clone.
2. DNA.
3. Progeny.
4. Thymine.

\_\_\_\_ 6.) Adenine, guanine, cytosine, and thymine are all:

1. Acids
2. Bases
3. DNA
4. Genes

\_\_\_\_ 7.) Recombinant DNA technology is also known as:

1. Bovine somatotropin (BST).
2. Gene splicing.
3. Porcine somatotropin (PST).
4. X-Gal.

\_\_\_\_ 8.) Genetic engineering can be done to change:

1. Animals.
2. Microorganisms.
3. Plants.
4. All of the above.

\_\_\_\_ 9.) An important contribution of biotechnology to waste management is:

1. Bacteria that consume oil.
2. Disease-resistant bacteria.
3. Ice-minus bacteria.
4. Human bacteria.

\_\_\_\_ 10.) Chemical pollutants in water that may be decomposed or deactivated by bacteria

 Include:

1. Chlorine.
2. Fluoride.
3. Iron.
4. PCBs.
5. **MATCHING**

\_\_\_\_ 1.) Fruits and grains a.) Bacteria linked to food poisoning

\_\_\_\_ 2.) Yeast b.) Controls blood sugar levels

\_\_\_\_ 3.) Silage c.) Used to make alcoholic beverages

\_\_\_\_ 4.) Genetics d.) Embryo

\_\_\_\_ 5.) Genes e.) Result of dominant gene

\_\_\_\_ 6.) Tall pea plants f.) Deoxyribonucleic acid

\_\_\_\_ 7.) DNA g.) Causes bread to rise

\_\_\_\_ 8.) Fertilized cell h.) Fermented grains on forage

\_\_\_\_ 9.) Insulin i.) Heredity

\_\_\_\_ 10.) Salmonella j.) DNA and bases