**Epigenetics**

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| **Define Gene Expression:**  **Genes in use are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Genes not currently in use are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **List the factors that affect gene expression:** |
| **Define Epigenetics:** | **Define Genome:**  **Define Epigenome:** |
| **Describe the Nurture v Nature:** | **Why are twins often used to study epigenetic differences?** |
| **Describe some examples of epigenetic factors:** | |

**Complete the table below, based on the two processes that affect gene expression:**

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|  | **Histone Modification – Acetylation** | **Methylation** |
| **Description of what occurs?** |  |  |
| **Draw a diagram to represent what is occurring.** |  |  |
| **How does this affect gene expression? What changes are made?** |  |  |
| **Does this process enhance/inhibit gene expression?** |  |  |