**Traffic Lights**: Gene Expression and Regulation

*AP Biology*

Traffic lights is an activity to identify and learn prefixes (ex: cata-), root words, and suffixes (ex: -ate) that are content-specific for current unit of study. Below is a list of the words followed by two blank columns. The first column, labeled pre-assessment, is to be highlighted/colored in to indicate the level of understanding you have for the word. Green means you know it in the context of biology, yellow means you are familiar with the word but have some uncertainty in the context of biology, and red means that you don’t know the word in any context. For any term colored red or yellow you will need to define the word, describe them in your own words, explain how each is used in the current unit and then create a visual representation of each. These must be done in your **BILL** using foldables, notecards, or any other method that you come up with. These are **NOT** to be done electronically. At the end of the unit you will reevaluate your knowledge of the terms using traffic lights and take an assessment.

| **Term** | **Pre-Assessment** | **Post-Assessment** | **Term** | **Pre-Assessment** | **Post-Assessment** |
| --- | --- | --- | --- | --- | --- |
| **mut-** |  |  | **Transcription** |  |  |
| **syn-** |  |  | **TATA Box** |  |  |
| **script-** |  |  | **Enhancer** |  |  |
| **trans-** |  |  | **Codon** |  |  |
| **Mutation** |  |  | **Transfer RNA** |  |  |
| **Transcription Factor** |  |  | **Messenger RNA** |  |  |
| **Semiconservative Replication** |  |  | **Central Dogma** |  |  |
| **Antiparallel** |  |  | **Translation** |  |  |
| **Bacteriophage** |  |  | **Promoter** |  |  |
| **Purines** |  |  | **Anticodon** |  |  |
| **Pyrimidines** |  |  | **Repressor** |  |  |
| **Operon** |  |  | **Inducer** |  |  |
| **Enhancers** |  |  | **Acetylation** |  |  |
| **Methylation** |  |  | **Exons** |  |  |
| **Introns** |  |  |  |  |  |