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

**Participation points: \_\_\_\_\_/ \_\_\_\_ pts**

**Assessment Score: \_\_\_\_\_\_\_/ 21 Points**

**Total Score: \_\_\_\_\_\_/\_\_\_ points**

**pGLO Data Collection and Analysis**

**Directions: Examine your plates using the ultraviolet light. Record your observations in the two tables below.**

1. **Carefully draw any bacteria colonies onto each of the circles show below. In addition, record your observations regarding the fluorescence observed on each plate. (8 pts)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Plate Label | Drawing | Observations |
| **Transformation Plates** | **+pGLO****LB/amp** |  |  |
| **+pGLO****LB/amp/ara** |  |  |
| **Control Plates** | **-pGLO****LB/amp** |  |  |
| **-pGLO****LB** |  |  |

**2. Describe your observations on each plate. (4 pts (complete entire row)).**

|  |  |  |  |
| --- | --- | --- | --- |
| **Plate Label** | **Color of bacteria?** | **Number of Colonies?** | **Amount of bacterial growth (circle the most accurate description)** |
| **+pGLO – LB/amp** |  |  | **None Small Medium Lawn** |
| **+pGLO – LB/amp/ara** |  |  | **None Small Medium Lawn** |
| **-pGLO – LB/amp** |  |  | **None Small Medium Lawn** |
| **-pGLO – LB** |  |  | **None Small Medium Lawn** |

**Analysis**

**3. Make the following comparisons. Describe any differences and similarities you observe. (6 pts)**

|  |  |  |
| --- | --- | --- |
| **Comparison** | **Similarities** | **Differences** |
| **+pGLO LB/amp to**  **+pGLO LB/amp/ara** |  |  |
| **+pGLO LB/amp to** **–pGLO LB/amp** |  |  |
| **-pGLO LB/amp to****–pGLO LB** |  |  |

**4. Was your genetic transformation successful? Use at least 2 pieces of evidence from your experiment to support your answer. (3 pts)**