**Lesson Plan #\_\_\_ of Unit #\_\_\_**

|  |  |  |
| --- | --- | --- |
| **TOPIC/TITLE OF LESSON** |  | |
| **AUTHOR(S)** |  | |
| **GRADE LEVEL(S)** |  | |
|  |  | |
| **APPLICABLE PA CORE OR NEXT GENERATION STANDARDS:** | | |
|  | | |
| **LESSON OBJECTIVES:** | | **ASSESSMENT(S) EVALUATE**  **(formative and/or summative)** |
|  | |  |
| **ACTIVATION OF PRIOR KNOWLEDGE (RTOP #1) ENGAGE** | | |
|  | | |

|  |  |
| --- | --- |
| **TEACHING AND LEARNING APPROACHES EXPLORE, EXPLAIN, EXTEND** | |
| **WHAT IS THE TEACHER DOING?**  **RTOP (# 2-10; #9-12; #21-25** | **WHAT ARE STUDENTS DOING?**  **RTOP (#11-19)** |
|  |  |
| **WRAP UP RTOP (#14) EXTEND** | |
|  | |

Refer to the RED text in the headings to see how the 5 E’s correspond to the lesson plan components. It is the teacher’s prerogative where extension activities are addressed.

**Rubric for Lesson Plan #\_\_\_ of Unit #\_\_\_**

***Instruction: Use the rubric below to review your lesson against the indicators listed below. Consider how someone unfamiliar with your unit would rate your work. Place a checkmark in the appropriate rating box.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RTOP**  **Indicator** | **Indicator Description** | **Thoroughly**  **Addressed** | **Adequately Addressed** | **Some Evidence** | **No Evidence** |
| \_ | Aligned with PA Core or Next Generation Science Standards |  |  |  |  |
| \_ | Strong correlation between lesson objectives and assessment methods |  |  |  |  |
| \_ | Incorporates NASA content and/or resources within the lesson |  |  |  |  |
| \_ | Integrates available technology |  |  |  |  |
| #1 | Provides opportunities to help students to activate prior knowledge |  |  |  |  |
| #2 | Structures lesson to engage students as members of a learning community |  |  |  |  |
| #4, #5 | Utilizes a problem based/inquiry learning model in which students make predictions, estimations and /or hypotheses with a means for testing them |  |  |  |  |
| #12, 14 | Describes structured activities requiring student exploration, self-assessment, elaboration and reflection |  |  |  |  |
| #11, 16 | Indicates how students will use a variety of means to represent phenomena |  |  |  |  |
| #10 | Connects with other content discipline and/or real world phenomena |  |  |  |  |
|  | Incorporates the use of modeling, guided practice and independent practice |  |  |  |  |
|  | Identifies and/or provides an authentic real-world problem relevant to the students for them to solve |  |  |  |  |
|  | Addresses each of the 5 E’s—engage, explore, explain, extend, and evaluate |  |  |  |  |