|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Assessment of **Lesson 1: Light & Sound  Goal:** Students will understand and make a complete circuit using unfamiliar materials | | | | |
| **Objective:** | **Below (1)** | **Approaching (2)** | **Proficient (3)** | **Advanced (4)** |
| A. Make the LED light up and make the buzzer sound | Unable to do either one | Does one or the other but not both; or does both but can’t explain how it was done | Able to accomplish both tasks and articulate the process in some form | (3) + able to share knowledge with others and/or make observations about polar and non-polar devices |
| B. Recognize that both buzzer and LED are polar devices | No awareness of polarity | Awareness of polarity is evident in some form, but not consistently | Understanding of polarity is consistent across oral, written and graphic forms of communication | (3) + able to relate concept of polarity to other kinds of devices, such as batteries |
| C. Recognize meaning and need for a complete circuit | No writing or drawing | Writing and drawing do not reflect complete circuit | Complete circuit is evident in either circuit drawing or written description | Complete circuit is evident in both circuit drawing and written description |
| D. Identify types of energy and energy transformations in the circuit | No identification | One of kind of energy is identified | Identifies chemical (or electrical or potential), light and sound | Describes LED as device that transforms electrical to light energy, buzzer as device that transforms electrical to s9und energy, and/or battery as a device that stores chemical energy and releases it as electrical energy. |