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| **Mission 3 Assignment Log** | **Name:** |
| **Pre-Mission Preparation** | |
| This mission is about conserving energy. What are some ways technology can help you conserve energy? |  |
| A peripheral used in this mission is the motion sensor. What are some devices you have seen or used that use a motion detector? |  |
| **Mission 3 Checks** | |
| Objective #1  Why is the name for the peripheral “led” instead of “white\_led”? |  |
| Objective #2  What is the difference between sleep() and sleep\_ms()? |  |
| Objective #3  What is the difference between a digital output peripheral and a PWM output peripheral? |  |
| Objective #4  How is an analog input peripheral different from a digital input peripheral?  What does the divider do?  When running your code, observe the lowest and highest values of the potentiometer. |  |
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| Lowest value:  Highest value: |
| Objective #5  Explain PIR:  What type of peripheral is a motion sensor? |  |
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| Objective #6  What is the problem with using sleep\_ms() as a delayed shutdown? |  |
| Objective #7  Describe a non-blocking timer: |  |
| **Post-Mission Reflection** | |
| Describe an error that happened in your code, how you detected it and how you fixed it. |  |
| This mission uses a built-in timer for controlling lights. What other devices have you seen or used that have a built-in timer? |  |