

Name: _____ Date: _____ Class: _____

Quantitative Data Table Handout **Example Answers**

Instructions

1. Turn on the LabQuest and light probe.
2. Set a timer for 2 minutes.
3. Place a testing sample in place in the testing apparatus.
4. Close the door (to shut out ambient light).
5. Turn on the UV flashlight.
6. After 2 minutes, turn off the UV light and quickly record the first 5 numbers from the light probe and LabQuest.
7. Average the 5 readings to get 1 quantitative measurement of the bioplastic's phosphorescent glow.

Using the team-created apparatus:

Sample Name	5	10	20	40			
Data 1	3.4 lux	3.1	3.1	2.5			
Data 2	3.3	3.2	3.0	2.3			
Data 3	3.2	2.6	2.9	1.8			
Data 4	3.1	2.3	2.8	1.4			
Data 5	2.8	2.1	2.2	1.2			
Average	3.2	2.7	2.8	1.8			

Using the teacher-created apparatus:

Sample Name	5	10	20	40			
Data 1	7.0 lux	6.0	6.3	4.1			
Data 2	5.9	4.3	4.3	3.0			
Data 3	5.6	4.2	3.8	2.5			
Data 4	4.1	3.8	3.5	2.6			
Data 5	4.2	2.7	3.9	2.9			
Average	5.3	4.2	4.4	3.0			

Remember the measurement notation: The light sensor unit is **lux, the SI unit of luminance, equal to 1 lumen per square meter.**