

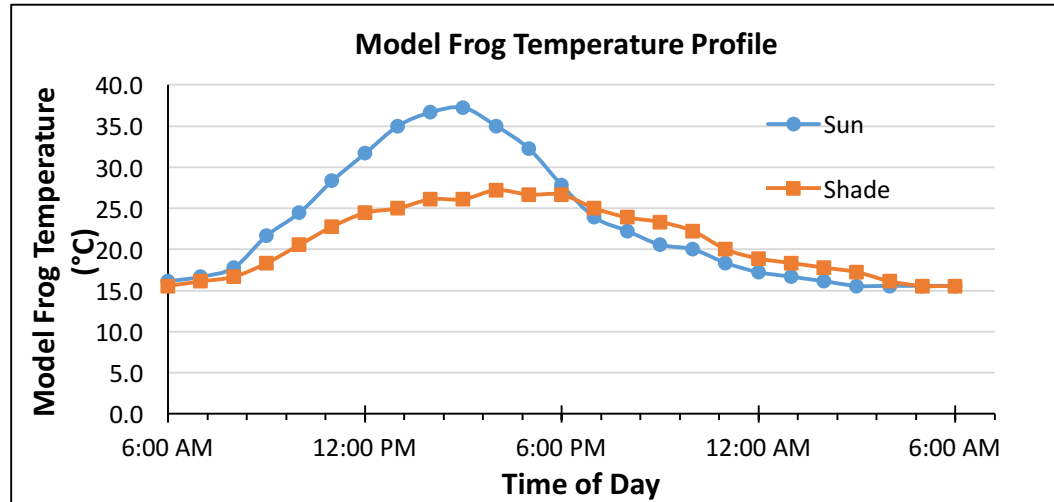
Name \_\_\_\_\_

## Ectotherm ER: Frogs Under the Weather

### Analysis

#### I. Model Frog Temperature Profile

Our ibutton data reflects frog temperatures collected over a 24 hour period. A graph of this information would look similar to the following:



#### II. Create Your Own Histogram

Use the ibutton data to create a histogram showing the number of times a frog reaches a certain body temperature range.

**Step 1:** Complete the following chart to tally how many times the frog's body temperature was within the given ranges.

Histogram Tally Chart			
Bin	Range	Sun Tally	Shade Tally
1	0 - 4 °C		
2	4.1 - 8 °C		
3	8.1 - 12 °C		
4	12.1 - 16 °C		
5	16.1 - 20 °C		
6	20.1 - 24 °C		
7	24.1 - 28 °C		
8	28.1 - 32 °C		
9	32.1 - 36 °C		
10	36.1 - 40 °C		

**Step 2:** Now use the Histogram Tally Chart to create a histogram on a separate sheet provided by your teacher.

**Step 3:** Use your histogram to answer the following questions.

1. What was the range of body temperatures that the 'sun' frog experienced? \_\_\_\_\_
2. How did the range of body temperatures that the 'shade' frog experienced compare to those of the 'sun' frog ? \_\_\_\_\_