Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ #\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour\_\_\_\_\_\_\_

**Station #3: Patterns Uncover and Share Your Ideas**

(20 point formative assessment)

**Unit Essential Question:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Lesson Question:** How can we make accurate predictions?

**Objectives:**

* Students share their understandings of how interpreting data is used to make accurate predictions.
* Students examine patterns in data by comparing average monthly low temperatures and daylight hours for a specific city.

**Uncover Your Ideas Directions:** Follow the step-by-step directions below; answer all questions with a restate.

1. Make a prediction: What do you think the average temperature would look like across the United States?

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2. Is the average temperature the same across the United States? **YES NO MAYBE**

3. Why does the average temperature the same across the United States change? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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4. Turn your prediction into a hypothesis: If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

then\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**\_\_\_\_\_teacher-check in; ask for the data tables.**

5. Get one of the Average Monthly Temperature & Daylight data sets from your group leader; notice that they are all different.

6. You will use the template on the next page to construct a graph from your data table.

7. Use this checklist to make sure that you include all of the necessary components of a graph:

 \_\_\_\_\_ title

 \_\_\_\_\_ x-axis label

 \_\_\_\_\_ y-axis label

 \_\_\_\_\_ x-axis scale

 \_\_\_\_\_ y-axis scale

 \_\_\_\_\_ a key

 \_\_\_\_\_ two different colored pencils/markers to show the difference between **Average low temperature (oF)** and **Average daylight (hour**



**\_\_\_\_\_teacher-check in**

**Share your Ideas Part I Directions:** Answer the following questions using complete sentences with a restate.

1. Describe the pattern you notice for average low temperature from the beginning to the end of the year:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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2. Describe the pattern you noticed for average hours of daylight from the beginning to the end of the year:

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3. How might these patterns be related?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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4. Do you think the yearly average temperature graph of Detroit, MI will be similar to that of Miami, FL? Explain:

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