**Follow-up Analysis Worksheet #5 Answer Key**

**Essential Questions:** How is mathematics connected to the engineering process?

According to Florida Fish and Wildlife Conservation Commission, a bloom of the red tide organism, *Karenia Brevis,* persists on the Florida Gulf Coast. This type of algae is categorized using different bloom concentrations which are measured in (cells per liter).

**Read the chart below** created by Mary Harper, FWC/FWRI, of St. Petersburg, Florida.



1. There are 1,000 cells/L in a river near your house. but at your friend’s Charles house there is 10,000 cells/L. How many times greater is 10,000 than 1,000?

Ⓐ 10,000 is 10 times more than 1,000.

Ⓑ 10,000 is 100 times more than 1,000.

Ⓒ 10,000 is $\frac{1}{10}$of 1,000.

Ⓓ 10,000 is $\frac{1}{100}$of 1,000.

1. Jan and Lin decided that they wanted to spend the day at Indian Rocks Beach but there was a significant difference between the number of algae present from the amount at Clearwater Beach. Indian Rocks Beach has 1,000,000 cells/L present and Clearwater Beach has 10,000 cells/L. How many times greater is the algae present at Indian Rocks Beach than at Clearwater Beach?

Ⓐ The algae present at Clearwater Beach is 10 times more than Indian Rocks Beach.

Ⓑ The algae present at Clearwater Beach is 100 times more than Indian Rocks Beach.

Ⓒ The algae present at Clearwater Beach is $\frac{1}{10}$less than Indian Rocks Beach.

Ⓓ The algae present at Clearwater Beach is $\frac{1}{100}$less than Indian Rocks Beach.

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1. Using the map above, what is the difference of algae present between Treasure Island and St. Pete Beach? Treasure Island currently has 1,000,000 cells/L whereas St. Pete Beach currently has 100,000 cells/L.

Ⓐ Treasure Island has 10 times more algae present than St. Pete Beach.

Ⓑ Treasure Island has 100 times more algae present than St. Pete Beach.

Ⓒ The algae present at Treasure Island is $\frac{1}{10}$less than St. Pete Beach.

Ⓓ The algae present at Treasure Island is $\frac{1}{100}$less than St. Pete Beach.

1. According to the map above, how many areas have 0-1,000 cells per liter present?

 Ⓐ One

 Ⓑ Two

 Ⓒ Three

 Ⓓ Four

 Ⓔ Five

 Ⓕ None of the above