**How Clean are Maine’s Beaches?**

**Earth Science**

 In the U.S., there are 30 states that have beaches on large bodies of water (such as the Pacific Ocean, Atlantic Ocean, Great Lakes, or the Gulf of Mexico). Go online and examine a map of the U.S., paying attention to identifying the states that border oceans or the Great Lakes. Then answer this question:

How clean do you think Maine’s beaches are in comparison to the other 29 states on this list? Are Maine’s beaches cleaner than average (between 1 and 10), worse than average (21-30), or about average (11-20)? Write your guess in the space below:

Maine ranks \_\_\_\_\_\_\_ out of 30 in terms of beach water cleanliness.

 Now pair up with one other student and sit together so that you can take turns reading aloud to each other. Read the article that I passed out to you, which is from this summer’s Portland Press Herald. Once you have finished reading the article, answer the following questions.

What is Maine’s current beach water cleanliness ranking (2013) among the 30 states? Does this surprise you? Explain.

What was Maine’s ranking in the report from the previous year? What is the most likely reason for this change in ranking?

What percentage of the water samples taken in the summer of 2012 failed to meet the acceptable health standards for bacteria?

What kinds of pollutants are likely to be carried into our beaches with the runoff from heavy rainstorms? Please list.

Jessamine Logan, the Director of Communications for Maine’s Department of Environmental Protection, states that “Our beaches are clean”, and “Maine is proud that more than 95% of our beaches are clean”.

What specific evidence does Logan use to support her claim that Maine’s beaches are actually very clean?

Personally, are you proud of the cleanliness of Maine’s beaches? Does this article inspire you to call friends/relatives from out of state to encourage them to visit Maine’s beaches?

What is Jessamine Logan’s job with the Department of Environmental Protection?

What do you feel is the most likely reason that Logan presents such a positive image of Maine’s beaches in this article?

How frequently are beaches in Maine tested?

What does Environment Maine’s Emily Figdor recommend should be done to improve Maine’s beach water testing program?

Based on what you’ve learned from this article, do you agree or disagree with Figdor? Explain.