

NAME _____

ATLANTIC COAST SAND LAB

Go to my “Projects” page at <http://www.gatesscience.info/teamescience/projects.htm> Then click on Atlantic Sand Lab. A map of the Atlantic Coast will come up. Each yellow dot represents a sample. Click on a dot, and you’ll go to that beach’s page. Go to the bottom and click on “Return to Data,” and you’ll go to a table that you created with all of the information. Use these pages to answer the following questions.

1. What was your sample number? _____
2. What was the name of the beach and the city and state it was in?
3. Sand is created by rocks being abraded. Where did the rocks originate that formed the sand on your beach? Don’t skip over this question. Go back and look at the map. Do a little research.
4. Some people thought that the size of the sand grain was controlled by the latitude. As you head from north to south, is there any pattern to the size of the sand grains? What is the pattern?
5. Some people thought that the color of the sand was controlled by latitude. Their hypothesis was that because the concentration of the light was strongest in the southern latitudes, the sand would be bleached. Do the sands get lighter as you go south? If yes, do you think that’s controlled by the sun. If no, what does control the color of the sand?

6. How does the percentage of each of the materials listed in the table below change, as you head south?

Material	Change in %
Biotite	
Muscovite	
Hematite	
Hornblende	
Feldspar	
Quartz	
Garnet	
Organics	

7. Rewrite your hypothesis to explain what happens to the physical characteristics of sand as you head south. How confident are you in your answer? What would you need to do to prove it?