Name_____ Period _____ Date _____

Storm Surge

Lesson 6: How Does Storm Size Affect Storm Surge Damage?
Hurricanes can vary widely in size. The average hurricane has a diameter of about 300 miles. How does the size of a storm impact the damage done on property and people due to a storm surge?

Doing the Science
1.   Start the Storm Surge Simulation by clicking on the "Sim" tab.
2.   Select "Storm Factors."
3.   Select "Storm Size."
4.   Choose one of the three different storm sizes.
5.   Make sure to keep all other factors constant, that is, do not change storm intensity, forward speed, or location.
6.   Click on the "Run" icon.
7.   Record the Cost and Damage values displayed in the Damage Assessment portion of the screen in Table 1 below.
8.   Again, click on "Storm Size." Select a different size from step 4. Repeat steps 6 – 7.
9.   Repeat step 8 for the remaining size.

Table 1.

Storm Size	Cost of Damage ($)	Damage Factor
Large		
Medium		
Small		

Do You Understand?
1.   How is storm pressure related to storm size?

2.   How is wind speed related to storm size?

2.   How does storm size impact the damage done by a storm surge?