

GRADES 6-8

REPRODUCIBLE MASTER

# ACTIVITY 3 STORM SURGE

The storm surge can sometimes be the most devastating part of a hurricane. To observe firsthand the power of a storm surge, follow your teacher’s directions to create a model that will show how the forces that govern the surge can affect its impact. Record your findings below, then answer the questions.

OBSERVATIONS	
Type of disturbance	Distance felt inland
Gentle waves	
Medium waves	
Storm surge	

1. Describe what happened in the model when you created gentle waves:

\_\_\_\_\_

\_\_\_\_\_

2. Which area of your model was most impacted from the waves?

\_\_\_\_\_

\_\_\_\_\_

Explain why:

\_\_\_\_\_

\_\_\_\_\_

3. Describe what happened in your model when you created a stronger storm:

\_\_\_\_\_

\_\_\_\_\_

4. Which area of your model was most impacted by the waves?

\_\_\_\_\_

\_\_\_\_\_

5. Describe what happened in the model when you created the hurricane storm surge. Include a description of areas inland:

\_\_\_\_\_

\_\_\_\_\_

6. Was there any area of your model that was “safe” during your hurricane storm surge?

\_\_\_\_\_

\_\_\_\_\_

Explain your answer:

\_\_\_\_\_

\_\_\_\_\_

7. If an evacuation had been ordered, how far should people travel from the shore in order to be out of harm’s way? Support your answer using ideas from the model and further research if necessary:

\_\_\_\_\_

\_\_\_\_\_

8. What recommendations would you make to people who want to build on coastal areas?

\_\_\_\_\_

\_\_\_\_\_

9. Describe how the effects of a storm surge can impact the lives of people living in that area as well as the economy of the community:

\_\_\_\_\_

\_\_\_\_\_

**Conclusion:** As a class, discuss what a storm surge is, how it is produced, and how it affects the low-lying areas along a coast.

