



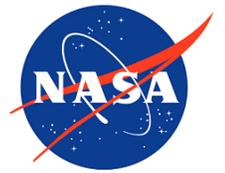
Name: _____ Date: _____ Class: _____

Title: Hurricane Sandy to Scale

Student Sheets

1. Explore the information about Hurricane Sandy at this link
<https://www.nasa.gov/content/goddard/two-years-later-nasa-remembers-hurricane-sandy/>.
2. The diameter of Hurricane Sandy was approximately 1600 km. What was the radius? _____
3. What was the area? _____
4. Estimate the circumference of the hurricane. _____
5. Calculate the circumference if it were a perfect circle. _____
6. Use the US map provided to draw a circle to scale centered in Kansas. Use the radius you calculated.
7. How would the effects of a hurricane in Kansas be different from a coastal community?

8. Redraw the circle with the center over New Jersey.
9. Look at the image provided to compare the area covered. How many states would be affected? _____



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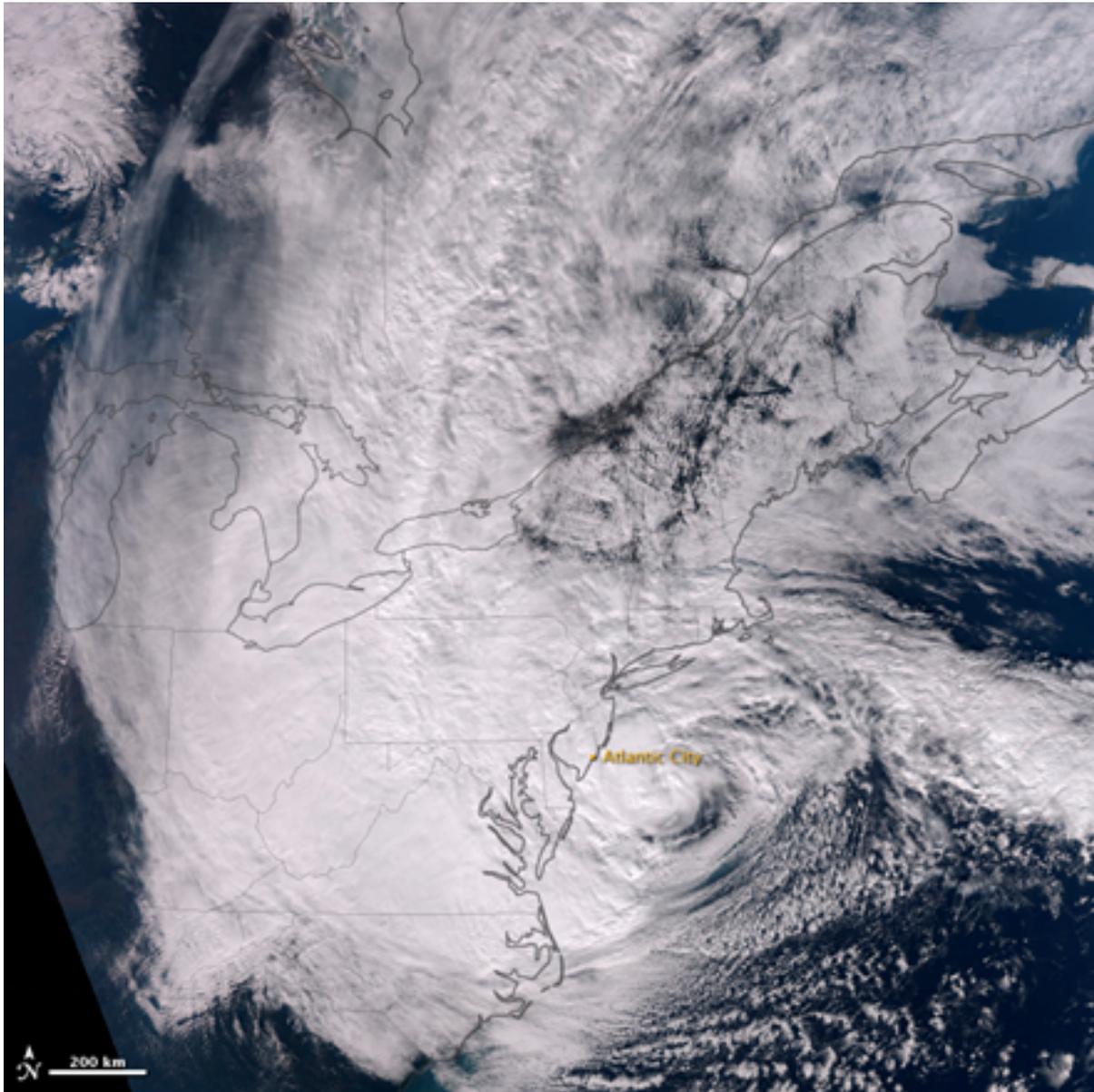


Image Credit: NASA Earth Observatory Image - Hurricane Sandy



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10. What states were actually affected?

11. What does this mean for people who may not be directly where the eye of the hurricane hits, but are within the area of the storm?

12. What effects would you expect people and communities to experience from the hurricane?

13. Use the Claim, Evidence Reasoning technique to answer the question: "When a hurricane is approaching the coast, why is it important for people away from the center of the hurricane to prepare?"



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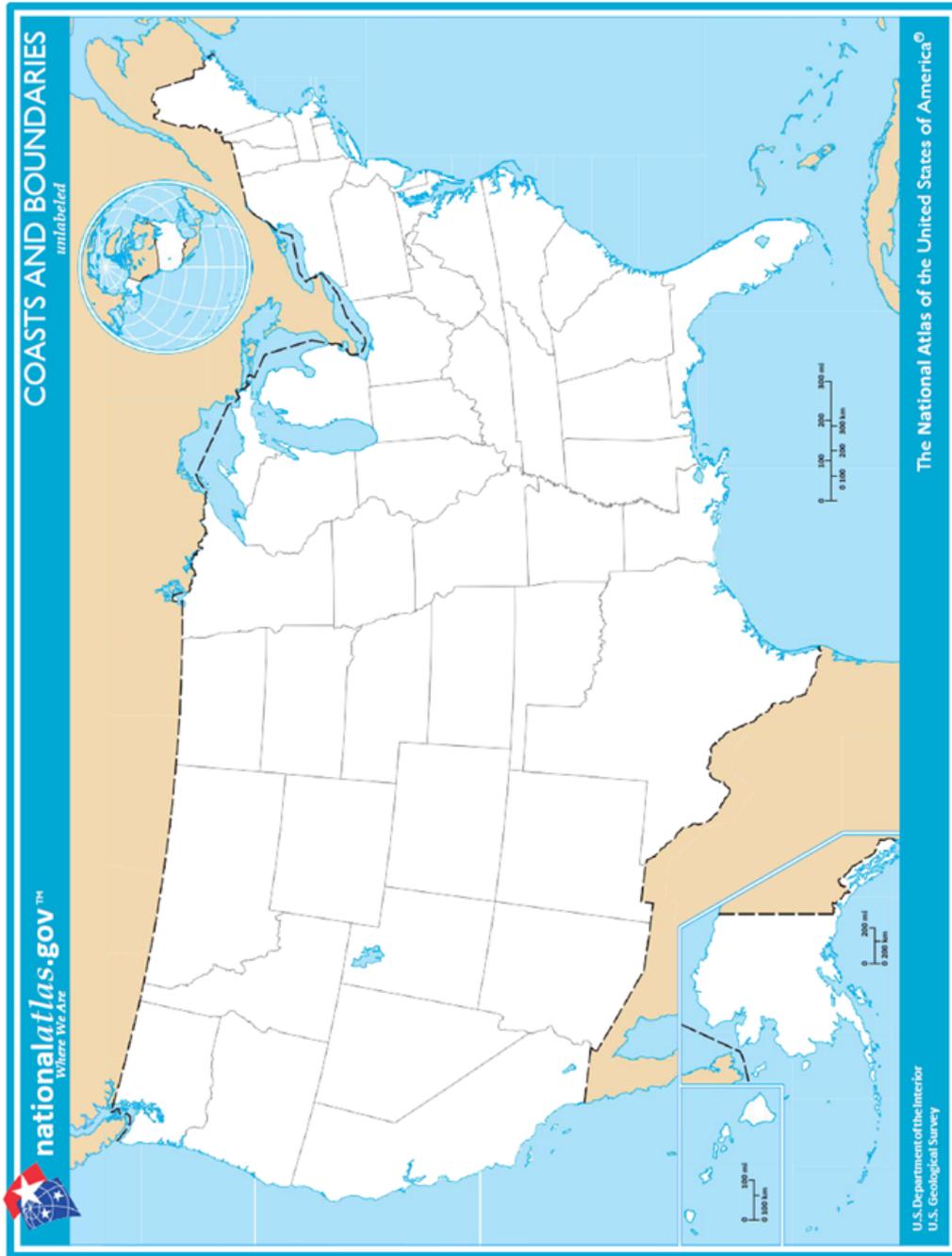


Image Credit: U.S. Department of the Interior/U.S. Geological Survey Map





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Claim: (One sentence statement that addresses the driving question: *When a hurricane is approaching the coast, why is it important for people away from the center of the hurricane to prepare?*)

Evidence: Sufficient, Appropriate, and Observation Driven	Reasoning: (Why is this evidence important?)
Map Image 1. 2. 3.	Map Image 1. 2. 3.



Name: _____ Date: _____ Class: _____

Claim-Evidence-Reasoning Rubric

Description	3 Points	2 Points	1 Point	0 Points
Claim	Makes an accurate and complete statement linking the images drawn and the conclusion.	Makes an accurate but incomplete claim addressing images drawn.	Makes an inaccurate claim.	Does not make a claim.
Evidence	Provides sufficient evidence to support claim using qualitative and quantitative observations of the images drawn.	Provides appropriate but insufficient evidence to support claim.	Provides inappropriate evidence. The evidence does not support the claim.	Does not provide evidence.
Reasoning	Provides reasoning that connects each piece of evidence to the claim. Uses data analysis skills to explain why the evidence supports the claim.	Provides appropriate but incomplete reasoning. Each piece of evidence is not supported by a line of reasoning.	Provides inappropriate reasoning.	Does not provide reasoning.
Total				