



## Lead Meteorologist – Post-Questions & Answers

- 1. What was the most important data you had to keep updated during the mission, and why?**  
*I had to keep the wind speed, air pressure, and storm category updated because that information affects whether a watch or warning should be issued.*
  - 2. How did you ensure your communication was clear and accurate when relaying information to the Mission Commander?**  
*I double-checked our team's data before sharing and used specific terms from the weather report form, so nothing was misunderstood.*
  - 3. How did your team's updates impact the decisions made at the National Hurricane Center?**  
*Our updates helped us decide which areas needed to be warned. It helped them track how fast the storm was growing.*
  - 4. What challenges did you face when organizing and presenting storm data to your classmates?**  
*Will depend on students*
  - 5. In a real-life hurricane event, why is the role of a Lead Meteorologist critical for public safety?**  
*Because they make sure everyone from the government to the public gets accurate, up-to-date information to stay safe and prepare in time.*
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## Forecast Specialist – Post-Questions & Answers

- 1. How did wind speed and air pressure help you determine the strength of each storm?**  
*The lower the pressure and the higher the wind speed, the stronger the storm was. We used that to categorize it on the hurricane scale.*
- 2. What tools or data helped you accurately categorize the storm using the Saffir-Simpson Scale?**  
*We used the storm data sheet with wind speeds and matched it to the scale chart to assign the correct category.*
- 3. How did converting wind speed units affect your understanding of storm intensity?**  
*It helped me see how powerful the storm really was in miles per hour. I realized that even small changes in numbers mean big changes in danger.*
- 4. Why is it important to name storms as they develop?**  
*Naming them helps people recognize them easily in alerts and news updates. It reduces confusion if more than one storm is happening.*
- 5. What was the most surprising trend you discovered while analyzing pressure and wind data?**  
*I noticed that sometimes pressure dropped really fast before wind speeds caught up, which meant the storm was about to strengthen quickly.*

## Zone Predictors – Post-Questions & Answers

- 1. How did plotting the storm's path help you predict its future location?**  
*It let us see the direction it was going and helped us guess where it would be next using past movement and speed.*
  - 2. What information did the Cone of Uncertainty provide, and how did it guide your team's decision-making?**  
*It showed us the possible range the storm could go, which helped us pick breakpoint areas most likely to be hit.*
  - 3. What made you select your three specific breakpoint areas?**  
*They were in the direct path or just slightly to the side within the Cone of Uncertainty. We picked areas with high population or coastlines. (may change depending on Students)*
  - 4. How does knowing the directional speed of a hurricane help in emergency planning?**  
*It tells us how fast people need to evacuate and how quickly the storm will hit land after being detected.*
  - 5. In a real-world situation, how could your role affect evacuation decisions?**  
*If we predict the wrong area, people might not evacuate in time. Our predictions can help save lives by focusing efforts where they're needed most.*
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## ETA Advisors – Post-Questions & Answers

- 1. How did calculating the estimated time of arrival (ETA) impact the timing of advisories?**  
*It helped us figure out when people needed to be warned and when it might be too late to evacuate safely.*
- 2. What strategies did you use to accurately measure storm distances to breakpoint areas?**  
*We used a map scale to measure the distance and divided it by the storm speed to get the ETA.*
- 3. How did your storm surge analysis influence the severity of your advisories?**  
*If a storm was strong with low pressure and high winds, the surge would be more dangerous, so we made our advisories more urgent.*
- 4. What did you learn about the importance of issuing timely warnings?**  
*If we wait too long, people might not have enough time to leave or prepare. Early warnings are lifesaving.*
- 5. If a hurricane changed speed or direction suddenly, how would that affect your ETA calculations?**  
*It would throw off our numbers, so we'd have to recalculate fast and send out a new advisory.*