developed by the
Global Precipitation Measurement Mission
GPM.NASA.GOV / EDUCATION   TWITTER.COM / NASA_RAIN   FACEBOOK.COM / NASA.RAIN

Name: _____ Date: _____ Period: _____

Hurricanes and Hot Towers with TRMM
Student Capture Sheet

Objective: _Describe the factors that cause a hurricane to form, and how satellite data helps improve the prediction of hurricane tracks and intensity._

Have you ever experienced a hurricane or a severe storm? What was it like? _____

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What are the three things that hurricanes need to be able to form? Write a few notes about each.

Why do we want to be able to predict hurricanes? _____

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What is a track forecast cone? _____

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How has hurricane prediction changed over time? _____

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What instruments does TRMM use to study hurricanes? What can they tell us? _____

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What are "hot towers" and what do they tell us about hurricanes? Note anything you think is important from the "Towers in the Tempest" video. Draw some diagrams (with labels) to help with your explanation. Be prepared to use the information from this capture sheet to create a news report telling people about a hurricane coming their way, and how hurricane prediction has changed over time. *Optional:* Make notes about what to do to prepare for a hurricane_____

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Space for diagrams and drawings:

Name: _____ Date: _____ Period: _____

<u>Hurricane News Report or Comic Strip</u>

Explain what you've learned about hurricanes, what causes them and how and why we try to predict them! Create a news report or weather forecast telling people about a hurricane that's coming – how it formed, and how we know where it will hit and if it will intensify. You can create a script to read (lines below), or make a comic strip (back of paper).

Some ideas to consider including:

- How is hurricane forecasting different now than it used to be?
- Imagine being a weather forecaster in two different areas of the coast, one in the direct path of the hurricane and one only near it. What would be different about what you tell people about the storm?
- How does our knowledge of a storm change as it gets closer? How might that change what you need to tell people?
- *Optional:* How should people prepare for a hurricane?

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Use the boxes below to create a comic strip showing a news report or weather forecast, or telling the story of a storm as it approaches. Be sure to refer to the prompts on the other side of the paper as you draw if you need ideas. You can use the lines below the boxes for captions, or leave them blank and use speech or thought bubbles in the boxes themselves.