#### Notebook Entry

### Name, Date, Class hour

Title: Gutters & Global Wind (Sail Boat Challenge)

LT: Use knowledge of Earth's rotation, which deflects surface winds, to design a sail boat that effectively uses wind currents.

# **Drawing with captions**

- Include original design drawings of your sailboat and final drawing of your sailboat.
- Drawing of the set up and information that describes the event (what happened).
- Use colors to help clarify

	Challenge:	<b>Determine</b>	the average	time for	both cores.	Who won?
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Core 8-1 average	Core 8-2 average
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#### **Summary paragraphs:**

### 1. Design Analysis

- a) Based on your data, which design characteristics were most effective?
- b) Based on your data, which design characteristics were least effective?
- c) Identify specific "puzzles" you observed and discuss the "puzzles". Example: Some sail boats had larger sails and did well while others struggled. Were there other factors that influenced the performance? If so, which factors?
- d) Hypothetical design. Create a good quality drawing (with captions that explain why you chose those features) of your hypothetical "next generation" sail boat.

# 2. Global Winds.

You are the navigator for Captain James Cook and he has asked you to determine which course to set so your sailboat leaves from London, England and arrives in Sydney, Australia.

Using what you know about global wind patterns, plot a course (drawing on the map) that takes advantage of these winds and explain why you chose this course.

