**SAILING THE SURFACE OCEANOGRAPHIC CURRENTS**

After completing the logic problem, students may complete any or all of the following supplemental questions and exercises. Teachers are encouraged to select and/or modify the following questions to match the appropriate classroom goals for content learning and skill building.

**MAPPING THE SURFACE OCEAN CURRENTS**

* On a blank map of the world (a map with only the outline of the continents), draw in the location of the equator.
* Write on the map the names of the ocean basins (North Atlantic Ocean, South Atlantic Ocean, North Pacific Ocean, South Pacific Ocean).
* Write on the map the location of the four oceanographic surface currents from the logic problem (Benguela Current, Canary Current, Kuroshio Current, Peru Current).
* Draw arrows showing the direction each current is flowing.
* Which currents are warm-water currents, and which currents are cold-water currents? How do you know?
* Would Maggie have needed to put a winter coat on or take her winter coat off during her journey on her ocean current? Would Tom have started his journey with a winter coat on, or would he have needed to put one on as he continued to sail along his surface current?

**SUPPLEMENTAL RESOURCES**

Ocean Currents and Climate (USC)

<http://earth.usc.edu/~stott/Catalina/Oceans.html>

Ocean Currents Collection (NOAA Education)

<http://www.education.noaa.gov/Ocean_and_Coasts/Ocean_Currents.html>

Ocean Currents Video (NOAA)

<http://www.montereyinstitute.org/noaa/lesson08.html>

Ocean Currents Video (Science Channel, ~2 minutes)

<http://science.discovery.com/tv-shows/mutant-planet/videos/mutant-planet-ocean-currents.htm>

Swirling Visualization of Ocean Currents Video (Popular Science, ~3 minutes)

<http://www.popsci.com/technology/article/2012-03/video-swirling-visualization-oceans-currents>

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