

Name \_\_\_\_\_ Date \_\_\_\_\_

Find a website to read and research the following questions. Answer in complete sentences in your own words. Reference your website after each answer.

1. What are tides?

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2. What are currents?

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3. What are some examples of tools that scientists need to measure currents?

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4. How are ocean buoys used to learn about tides, currents, and weather forecasting?

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Answer Key:

Please use your expertise as an educator to help students locate the information. This is not a definitive list of answers, just examples.

1. What are tides?

“Tides are the daily or twice-daily rise and fall of the oceans. Tides are caused by the gravitational pull of the moon and sun on the ocean”.

<http://www.onegeology.org/extra/kids/earthProcesses/coasts.html>

“Tides start in the ocean and move towards the coast, where they appear as the regular rise and fall of the sea surface. How much the water changes over the day varies depending on where you and what day it is”.

<http://oceanservice.noaa.gov/navigation/tidesandcurrents/>

2. What are currents?

“Currents put motion in the ocean! Tides involve water moving up and down; currents involve the movement of water back and forth. Currents are driven by several factors. Tides are one of these. Wind, the shape of the land, and even water temperature are other facts that drive currents.”

<http://oceanservice.noaa.gov/navigation/tidesandcurrents/>

3. What are three tools that scientists need to measure currents?

“To measure currents, you need three basic tools – an observer, a floating object or a drifter, and a timing device.”

<http://oceanservice.noaa.gov/navigation/tidesandcurrents/>

4. How are ocean buoys used to learn about tides, currents, and weather forecasting?

“Scientists use the data to look for patterns over time to predict the weather. Fishermen use information about tides and current as well as boat captains navigating ships in ports. The oceans rise and fall each day, due to the gravitational attraction of the moon and sun on the Earth’s surface.