Name:

## **Exploring Water Bodies with Google Earth**

Ocean tides are caused by the gravitational attraction of the moon and to a lesser extent the sun during Earth's orbital motions. In this activity, you will use Google Earth to analyze the shapes of four water bodies to determine if these would be good places to locate a tidal power plant.

Read **all** instructions and answer **each** question on your field guide.

## Step 1: Download data. a. Open your Web browser. Go to www.ei.lehigh.edu/learners/energy/ b. Click on Exploring Water Bodies with Google Earth. c. Click the arrow to the left of "Water //\* A\* // 🛛 🖪 Bodies.kml" in the left panel (see arrow). • 2 • • > **NOTE:** If the navigation controls are not Add Conte visible click on View>Show Navigation>Always. •• " Google The Water Bodies drop-down list will extend. Water Bodies.kml If you cannot see the whole list, scroll down. Bay of Fundy The Bay of Fundy is located on the Atlantic coast of North 🖬 🗱 Severn Bay The Severn Bay is located between England and Wales. It 🖬 🗱 Baltic Sea The Baltic Sea is located in Northern Europe between Gulf of Mexico The Gulf of Mexico is located between USA, Mexico, and

## **Step 2: Examine the shapes of the water bodies.**

a.	Double-click on Bay of Fundy in the Places window.
b.	Click on the Bay of Fundy icon 🧱 in the <b>3D viewer</b> to read information about the Bay.
	Write the tidal range of the <b>Bay of Fundy</b> in the <b>Water Bodies Data Chart</b> on your field guide.
C.	Look closely at the <b>shape</b> of the Bay of Fundy. Use the <b>zoom-in</b> and <b>zoom-out</b> tools to view the shape in more detail. What does the shape of the Bay of Fundy look like? The bay of Fundy in the <b>Water Bodies Data Chart</b> on your field guide. For example, does it look funnel-like, elongated, hour-glass, circular, large and open, or something else?
d.	Double-click on Severn Bay, Baltic Sea, and Gulf of Mexico to view them. Click on each of the icons in the <b>3D viewer</b> to read information about these water bodies. Write the tidal range then draw and describe the <b>shape</b> of each water body in the <b>Water</b> Bodies Data Chart on your field guide.
	Answer <b>questions 1-4</b> on your field guide.