In the 1500’s the English navy used bottles to send messages about the enemy. Queen Elizabeth created an official position titled the "Uncorker of Ocean Bottles", and anyone else opening the bottle could face a death penalty.

During the LEARNING BARGE field trip, students can float their messages in a recycled bottle in the observation pool. The messages can be personalized, but should include how they can help make the river swimmable and fishable by 2020.

Learning Objectives
- Explore world traditions
- Learn why things float

Pre-Visit Activity (45 minutes)

1. Ask students to name items from nature and items manmade that might be found floating in the Elizabeth River. Then talk about buoyancy and how it may seem odd that an enormous vessel like the steel barge that weighs about 100 gross tons can float when steel is denser than water. Tell students if they look closely at the barge they will see there are many places filled with air that make the density of the barge less dense than water, so it floats!

2. Talk about runoff and ask students how items can get in the Elizabeth River and share that most end up on the bottom of the river, the benthos. Then discuss positive and negative affects.

3. Explain to students they are going to express through art and words how they could help make the Elizabeth River swimmable fishable by 2020 by decorating the template provided.

4. Share that different cultures celebrate rivers in different ways and The Elizabeth River Project’s LEARNING BARGE Team is looking forward to celebrating our home river with them.
How can YOU help make the Elizabeth River fishable and swimmable by 2020? Share with others by decorating one side of this paper with art or words.