

Bay at Work

Read how the Chesapeake Bay serves people, plants, and animals.

6.8.c “the Chesapeake Bay is an estuary that has many important functions; and”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline three sentences: one that explains how the Bay helps clean water, one that explains how it provides habitat, and one that explains how it protects shorelines. Number the sentences 1, 2, and 3.

An Estuary With Important Jobs

- ① The Chesapeake Bay is a large estuary, a place where fresh water from rivers mixes with salty water from the Atlantic Ocean. Tides move the mixed water twice each day. The Bay receives water from a watershed that includes parts of six states and the District of Columbia. Its shallow edges, underwater grasses, marshes, and mudflats create many kinds of living spaces. Because land and water meet here, changes upstream can affect the Bay's water, plants, animals, and people.
- ② The estuary helps improve water quality. Oyster reefs filter tiny particles from the water as oysters feed. Marsh plants and wetland soils can slow runoff, trap sediment, and take up some extra nutrients before they spread farther into the Bay. Clearer, cleaner water lets more sunlight reach underwater grasses. These grasses give young animals places to hide. Protecting oysters, wetlands, and grasses helps the Bay continue this water-cleaning function for nearby communities over time.
- ③ The Bay also serves as a nursery and shelter for many species. Blue crabs, striped bass, oysters, and waterfowl use its different habitats during parts of their life cycles. Sheltered coves and underwater grasses can protect young animals from strong currents and predators. Wetlands along the shore provide feeding and resting areas. In addition, wetland plants and roots hold soil in place and absorb some wave energy. This reduces erosion and can lessen flooding along nearby shorelines.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Why is the Chesapeake Bay called an estuary?

2 How do oyster reefs and wetlands help improve the Bay's water quality?

3 Name two ways Bay habitats help young animals.

4 How do wetland plants and roots help protect nearby shorelines?

3 YOUR TURN _____ Your own words

A town plans to remove a shoreline wetland to build a parking lot. Write three sentences explaining two Bay functions that could be affected and why the town should protect the wetland.

PART 1 • READ AND MARK

Underline three sentences: one that explains how the Bay helps clean water, one that explains how it provides habitat, and one that explains how it protects shorelines. Number the sentences 1, 2, and 3. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Why is the Chesapeake Bay called an estuary?	It is a place where fresh water from rivers mixes with salty water from the Atlantic Ocean.
2	How do oyster reefs and wetlands help improve the Bay's water quality?	Oysters filter tiny particles as they feed. Wetlands slow runoff, trap sediment, and take up some extra nutrients.
3	Name two ways Bay habitats help young animals.	They provide nursery and shelter spaces, including places to hide from strong currents and predators.
4	How do wetland plants and roots help protect nearby shorelines?	They hold soil in place and absorb some wave energy, reducing erosion and helping lessen flooding.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Removing the wetland could allow more soil to wash into the Bay because roots would no longer hold the shore in place. The town could also lose an area that slows runoff and traps sediment. The city should protect the wetland because it helps keep the water cleaner and reduces erosion.

Accept equivalent descriptions of water cleaning, habitat or nursery support, and shoreline protection that match the passage. For the Your Turn response, accept any accurate two-function explanation with a logical reason to protect the wetland.