

# Mapping the Chesapeake Bay Watershed

**Grade Level:** 7

**Subject Area:** Life Science

**Objectives:**

Students will:

- Understand the concept of a watershed
- Locate key features of the Chesapeake Bay watershed
- Identify their location within the Chesapeake Bay watershed

**Summary:**

Students will complete a mapping activity in which they will map the Chesapeake Bay watershed, identify key features of the watershed, and identify their location within the watershed.

**Vocabulary:** watershed, tributary

**Materials** (designed for 7 groups of 2-5 students)

- 7 blank maps of the Chesapeake Bay watershed
- 7 vis-à-vis markers
- *Chesapeake Bay Watershed Mapping* worksheet (included, hard and electronic form), enough copies for each student or group
- Map of the Chesapeake Bay watershed
- Map of Virginia watersheds
- 7 maps of the Chesapeake Bay watershed, East Coast, or United States (students will use this to help them identify features of the Chesapeake Bay watershed)

**Procedure**

**Introduction**

1. Before you begin, use the map of the Chesapeake Bay watershed to describe a watershed to your students. A watershed is an area of land in which all of the water drains to a common body of water. It is important that they know about a watershed because they live within one – everyone lives within a watershed. Tributaries within a watershed are like pipelines, linking activities on the land to bodies of water. It is important for them to understand that even though they don't see the direct connection between where they live and the Bay, it is there. The connection is not just between people that live near the Bay

and the Bay, but also between the Bay and the 17 million people that live in the Bay's watershed. Every person that lives within the watershed and every activity that takes place within the watershed has the potential to impact the Bay.

### Activity

1. Pass out a blank map of the Chesapeake Bay watershed, a vis-à-vis marker, a worksheet(s), and a map to use as a reference to each group of students. Students should follow the instructions on their worksheet to answer the 10 questions on the worksheet.

### Wrap-Up

Go over the worksheet with your students and make sure they have correctly labeled and identified all of the features. To test the students' understanding of a watershed, ask them what happens if it rains in New York and someone in New York has recently put fertilizer on their yard? The rain will wash the fertilizer off of the yard and into a nearby creek. Because it is within the Bay's watershed, this creek, and the fertilizer in it, will eventually lead to the Chesapeake Bay. Discuss the last question on the worksheet "Why do you think it is such a hard and complicated task to clean up the waters of the Chesapeake Bay?"

For an additional discussion topic, you can use the map of Virginia's Watersheds to discuss your local watershed. Have students decide which local watershed they reside within. This helps students understand that smaller watersheds combine to create larger watersheds.



Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Mapping the Chesapeake Bay Watershed

1. Find and label the Atlantic Ocean and the Chesapeake Bay on your map.
2. On your map, find the two points that form the opening of the Chesapeake Bay into the Atlantic Ocean. Without crossing a body of water, including streams, rivers, bays, or ocean, draw a continuous line connecting the two points. Your line should weave around the maze of rivers and streams, but never cross any of them. This outlines the Chesapeake Bay watershed.
3. Draw the Appalachian Mountains in the correct location on your map.
4. Trace the state boundaries outlined on your map and label each state.
5. How many states have land inside the Chesapeake Bay watershed? \_\_\_\_\_
6. List all of the states that have land inside the Chesapeake Bay watershed.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Find and label the following five tributaries (rivers) of the Chesapeake Bay: Susquehanna River, York River, Rappahannock River, Potomac River, James River.
8. On your map, find the general location of your school, put an X where your school is located, and label the X.
9. Use the scale on the map to figure out how far your school is from the Chesapeake Bay (in miles). About how far is your school from the Chesapeake Bay? \_\_\_\_\_
10. Look at the Chesapeake Bay watershed on your map. Why do you think it is such a hard and complicated task to clean up the waters of the Chesapeake Bay?





Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## **KEY - Mapping the Chesapeake Bay Watershed**

1. Find and label the Atlantic Ocean and the Chesapeake Bay on your map.
2. On your map, find the two points that form the opening of the Chesapeake Bay into the Atlantic Ocean. Without crossing a body of water, including streams, rivers, bays, or ocean, draw a continuous line connecting the two points. Your line should weave around the maze of rivers and streams, but never cross any of them. This outlines the Chesapeake Bay watershed.
3. Draw the Appalachian Mountains in the correct location on your map.
4. Trace the state boundaries outlined on your map and label each state.
5. How many states have land inside the Chesapeake Bay watershed? **6**
6. List all of the states that have land inside the Chesapeake Bay watershed.  
**Virginia**  
**West Virginia**  
**Maryland**  
**Delaware**  
**Pennsylvania**  
**New York**
7. Find and label the following five tributaries (rivers) of the Chesapeake Bay: Susquehanna River, York River, Rappahannock River, Potomac River, James River.
8. On your map, find the general location of your school, put an X where your school is located, and label the X.
9. Use the scale on the map to figure out how far your school is from the Chesapeake Bay (in miles). About how far is your school from the Chesapeake Bay? \_\_\_\_\_
10. Look at the Chesapeake Bay watershed on your map. Why do you think it is such a hard and complicated task to clean up the waters of the Chesapeake Bay?  
**The Chesapeake Bay watershed is very large. It includes parts of six states and is 64,000 square miles in size. Every person that lives within the watershed (all 17 million of them) has the ability to affect the Chesapeake Bay – the tributaries throughout the watershed are like pipelines linking human activities on the land to the Bay. It is very difficult to regulate pollution and human activities that originate in areas far away from the Bay, such as New York, and it is very difficult to get people to change their activities when they don't realize that they have a direct link to the Bay.**

