

7th & 8th Grade Scavenger Hunt Answer* Key

*These are potential correct answers

Chesapeake Bay Watershed

1. How many states are there in the Chesapeake Bay watershed?
Answer: 5; New York, Pennsylvania, Maryland, West Virginia, Virginia, Delaware
2. An oyster can filter ____ gallons of water per day.
50
3. What is the largest estuary in the United States?
The Chesapeake Bay

Cultural History

1. Some scholars believe that the most dramatic change since the last Ice age to the Chesapeake Bay was what?
The arrival of the Europeans because they brought with them disease as well as cleared ancient timbers and domesticated animals.
2. What were some factors that led to the deforestation of Maryland?
The forests were used for lumber, fencing, shingles, and fuel, exported to England, and used in charcoal kilns for iron products.
3. What did the Native Americans call the “3 sisters”? What purpose did they serve?
The “3 sisters” is three garden plants that were planted together, corn, beans, and squash. The corn was used to trellis the beans, the beans were used for nitrogen replacement, and the squash suppressed weeds and kept the roots moist

Life of the Forest

1. An insect larva is an excellent source of what?
Insect larvae are an excellent source of fat, protein, and calcium.
2. What are 4 methods used by birds to gather food?
Four of the methods are ambush, gleaner, excavator, and earth prober.
3. How does an evergreen prevent moisture loss?
The leaves of an evergreen tree have a small surface area relative to their volume to help prevent moisture loss, sunken stomata to help prevent transpiring, and a waxy cuticle.
4. What colors are associated with 1) Chlorophyll 2) Carotenoids 3) Anthocyanins?
1) Green 2) Yellow, orange, brown, reds 3) Blues, purple, scarlet red
5. List three ways insects feed their “Big Appetites.”
Siphoners: Honeybees probe into flowers and suck up nectar with their long, hollow proboscides.
Cutter-Chewers: Luna moth caterpillars use their scissor-like mouthparts to nip off bite-sized pieces of leaves. Other cutter-chewers include grasshoppers, some beetles, katydids and crickets.

Piercer-Suckers: Aphids have a needle-like mouth, which easily pierces plants' outer coverings. The aphid then sucks up nutrients from the inside.

6. According to the handrail, why do birds migrate?

The migrants travel to find hospitable temperatures and to follow food.

7. What are the two true hibernators of our region?

Woodchuck: Chubby woodchucks are a common late-summer sight. The fat they accumulate from eating leafy greens enables them to survive from November to March without waking.

Red bats spend much of the year hunting and resting in the treetops—until it's time to hibernate. The red bat survives the winter on the forest floor, camouflaged by leaf litter, and kept warm by its furry tail membrane.

8. How do plants attract pollinators?

By having brilliant colors, beguiling scents and even directional patterns seen only by UV light-sensitive creatures like bees entice potential pollinators.

9. Testing the overall quality of running water can be difficult because pollutants flow down the river quickly. What are the names of three macro invertebrates that can tell us the health of the river and why are they good indicators?

Water penny = Low tolerance

Water pennies, riffle beetles and mayfly nymphs are fragile macro invertebrates, and are among the first to die when the water becomes polluted.

Crayfish = Moderate tolerance

Slightly more robust, creatures like crayfish, damselfly nymphs and freshwater clams can survive in mildly polluted waters.

Midge fly larvae = high tolerance

Organisms like aquatic worms, midge fly larvae, leeches, and flatworms have a high tolerance for pollution. If these creatures are the only ones left, water quality is impaired.

River otters have sensitive whiskers that are long and thick, helping them find prey in murky water. When they find something, sharp canines inflict lethal bites to prey, which include fish, crayfish, frogs, small mammals, birds, and insects.

Red foxes have nimble paws that are adapted for pinning and holding mice and other small prey. Like a cat, a fox uses its sharp teeth to kill its victims with a strong, piercing bite, unlike the "grab and shake" method used by other members of the dog family.

Raccoon paws are nearly as sensitive as human hands, and are used to locate and grasp prey, including slippery crayfish and slimy earthworms. While they appear to "wash" their food, raccoons are more likely examining it with their sensitive paws to make sure it's safe to eat.

10. Invasive species are non native plants that are now common in our area. What makes these plants invasive?

These common plants are actually invaders. Invasive species can disrupt an entire ecosystem by out-competing native plants for nutrients, light and space. They also affect wildlife because they often produce less nutritious foods and provide inferior nesting sites.