

Robinson Nature Center Exhibit Scavenger Hunt for 5th Grade

Chesapeake Bay Exhibit:

- 1) Which states are included in the Chesapeake Bay Watershed? NY, PA, MD, WV, DE, VA and DC (not NJ)
- 2) How many different species of plants and animals does the Chesapeake Bay support? 6300
- 3) What is the Bay's most efficient natural filter? Native Eastern Oyster
- 4) How many Americans live in Chesapeake Bay Watershed? 1 in 20
- 5) Up to 40% of the Bay is covered in "dead zones" (areas without light or oxygen) each summer. What causes dead zones? When nutrients like Phosphorous and Nitrogen wash into the water, they cause algae to grow very quickly creating large "algal blooms." These blooms of algae block light from penetrating below the surface of the Bay and they use up dissolved oxygen in the water.
- 6) Name 3 ways you and your family can help the Chesapeake Bay.

Use native plants, Use natural products, No dumping down a storm drain, Plant native flowers, tree, and shrubs. Mow less, use less fertilizer and weed killers, Pick up after your dog, Buy local produce, Drive less, combine errands, join car pools, take public transportation, bike and walk, Keep an eye on construction projects, Contact local officials to report problems you see

Changing Lives, Changing Landscape Exhibit:

- 7) Native Americans called this region home more than 12,000 years before Europeans first set foot here.
- 8) "Chesapeake" is derived from the Algonquian (a Native American language spoken in this region) for what? Great Shellfish Bay
- 9) Before the nature center was built, European settlers came to this land and built a mill and a town. What was the name of the town? Simpsonville
- 10) In 1860 what types of businesses were on this land in the mill village? Woolen Factory, Grist and Saw Mill, R. Downes Store, Wheelwright Shop, Blacksmith Shop

Life of the Forest Exhibit:

Summer:

- 11) Insects are a great source of 3 things for young, growing birds. What are those three things fat, protein and calcium
- 12) Name 3 materials that birds use to build nests. Spider webs, lichens, grasses and leaves, feathers and twigs

Fall:

- 13) What 3 components are responsible for the fall colors of leaves? Chlorophyll, carotenoids, anthocyanins
- 14) Where would a red bat spend the winter hibernating? On the forest floor camouflaged by leaf litter

Winter:

- 15) Parts of a tree:

Bark – provides vital protection to trees internal layers

Phloem (phlo goes down low) – sugar produced in the leaves travels down to the roots via this

Cambium – thin layer of growing cells, produces each year's new ring of growth

Xylem (xy goes up high) – conducts water and nutrients up from the roots to the leaves

Pith – food reserves are held deep in the tree

Spring:

- 16) Grey tree frogs can camouflage based on their surroundings. What other color, besides grey, can they be? gray, green or brown

Forest Floor/Nocturnal Forest:

17) What is decomposition, and how does it help the forest?

Decomposition is the process of rotting. It is the process by which organic substances are broken down into simpler forms of. Decomposition releases essential nutrients back into the food chain to nourish a new generation of plants and animals

18) Pollinators are animals that help plants reproduce by carrying pollen from one plant to another. Can you name 3 pollinators?

Bats, birds, people, insects: bees, butterflies, moths, flies, beetles and ants

19) Nocturnal animals are active at night. Name 3 nocturnal animals.

Raccoon, skunk, firefly, woodcocks, moths, beetles, owls

20) How are nocturnal animals' eyes different than diurnal animals?

Extra large eyes, lots of light sensitive rods and a reflective area behind their retina