

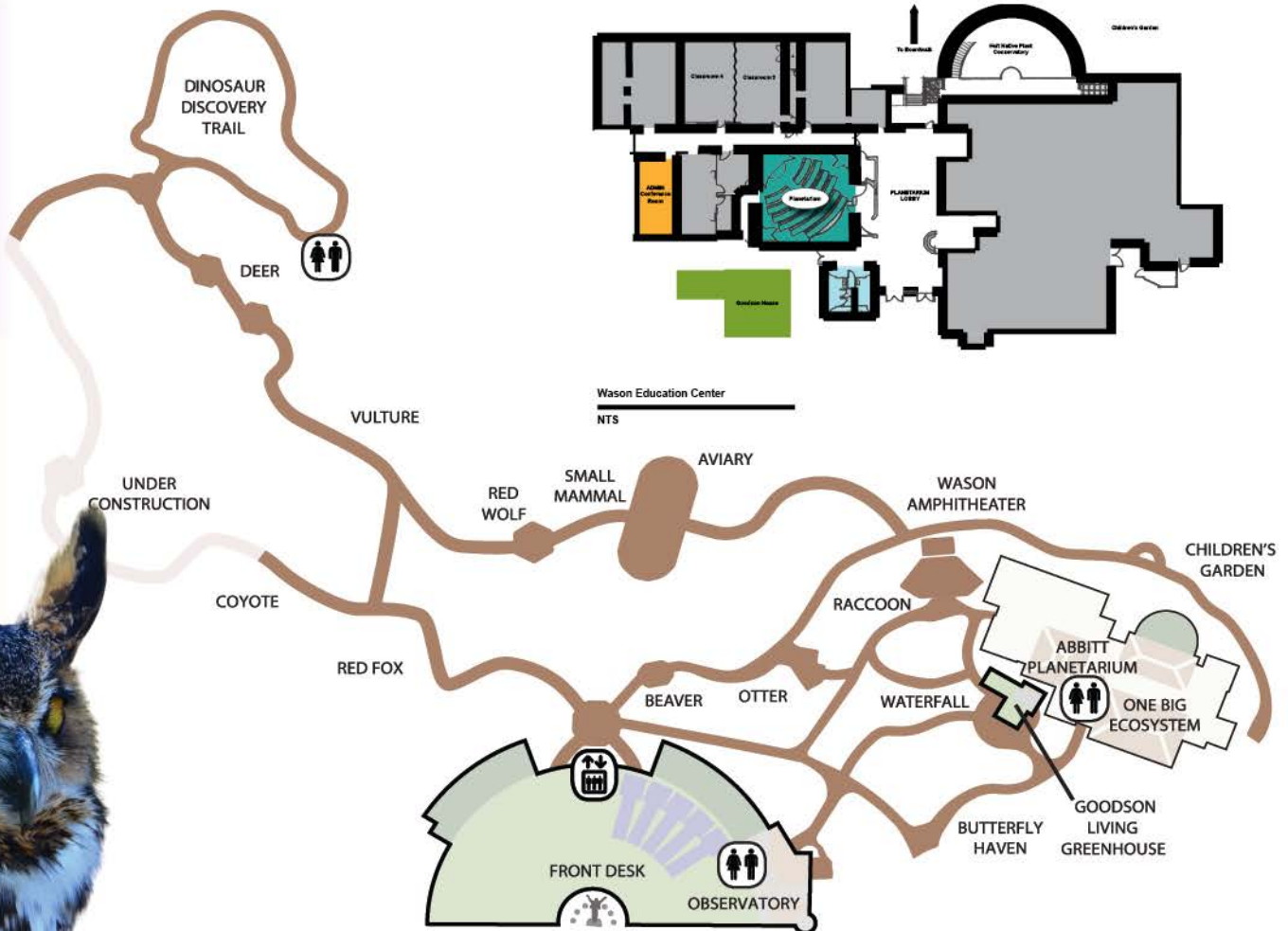
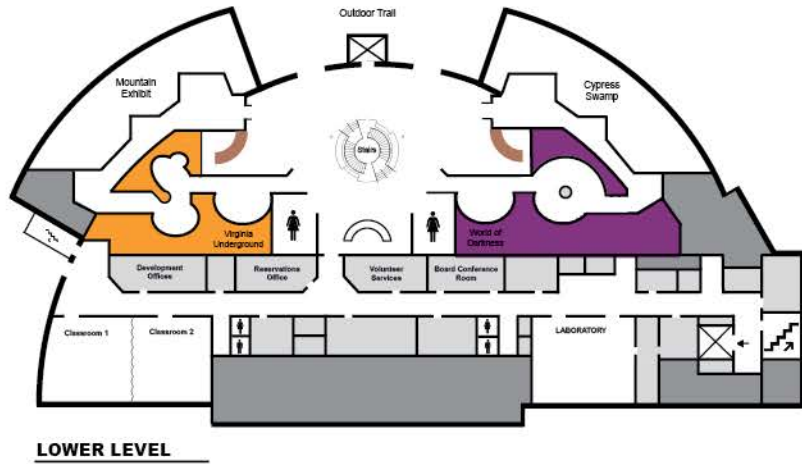
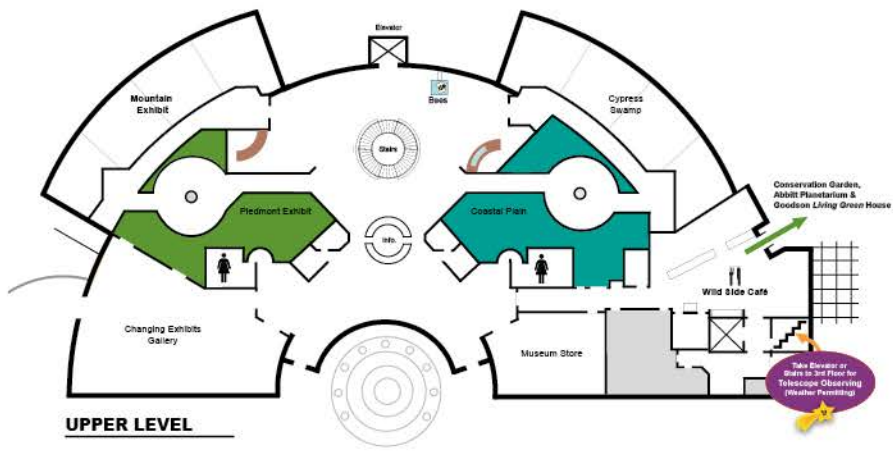
VIRGINIA
Living
museum



MUSEUM VISIT GUIDE

MIDDLE SCHOOL





Please review the following guidelines with your students and chaperones prior to your visit:

Museum Guidelines

- Respect others in your group and other museum visitors.
- Use indoor voices.
- Walk in the museum.
- No food or drink outside of designated picnic areas.
- Students are not permitted to carry backpacks/large bags in the museum.
- Teachers and chaperones **MUST** stay with their groups at all times.
- For the safety and enjoyment of all visitors, disruptive or unsafe behavior will not be permitted and may result in the entire group being asked to leave without a refund.

Respect the Animals

- Do not yell at the animals on the outdoor trail. This includes howling at our coyotes and wolves.
- Do not attempt to touch or feed any animal.
- Do not bang or tap on the aquarium glass.
- If an animal is touched at the Touch Pool, please wash hands or use hand sanitizer.
- Do not climb on exhibits.
- Keep hands out of the aquarium water.

We've listed some suggested activities to conduct with your students before and after your visit.

Pre-Visit:

- Define abiotic factors and biotic factors.
- What are symbiotic relationships and what are some examples?

Post Visit:

- Create a food web using animals that you saw during your visit.



Use the following guided questions to engage your students throughout the museum.

Coastal Plains Gallery:

- Observe the Chesapeake Bay Aquarium. What are some of the abiotic and biotic factors in the exhibit? How do humans impact this watershed?
- Lionfish were introduced into U.S. waters by humans releasing them in Florida. How do you think this disruption changed populations of other animals?

Piedmont & Mountains Gallery:

- Find one of the snake exhibits in the gallery. What role do snakes play in the food web?

World of Darkness:

- Find the decomposer exhibit. What are decomposers and what is their role in the food web?

Cypress Swamp Gallery:

- Observe all of the living species in the habitarium. What are some examples of producers and consumers? What are some ways that the producers and consumers interact?
- Looking at the producers in the habitarium, what is a producer and explain what they do for other living things? Where are producers on the food web?

VA Underground:

- Fossil evidence found on the York River shores tells us Virginia was covered by a shallow marine sea millions of years ago. This habitat supported corals and other aquatic species. Can you observe any symbiotic relationships in this coral exhibit?

Mountain Cove Gallery:

- The food web in a mountain stream depends heavily on outside sources of organic material to fall or wash into the stream. What could be some examples of organic material that could help the food web?

Conservation Command Center:

- Observe the trash exhibit and read the information about plastic pollution. When humans litter and use single-use plastics, how does this affect populations of animals and what are some ways we are able to help?

Outdoor Trail:

- Coyotes are considered to be “agricultural pests” due to their place in the food web. Why do you think that is?



ANSWER KEY:

Coastal Plains Gallery:

- Observe the Chesapeake Bay Aquarium. What are some of the abiotic and biotic factors in the exhibit? How do humans impact this watershed? *Abiotic: light, temperature, and water currents. Biotic: plants, fish, algae, and bacteria. Humans can impact the watershed in multiple ways - poor water quality due to pollution and land use, litter and marine debris, overfishing or overharvesting*
- Lionfish were introduced to the U.S. due to humans releasing them in Florida. How do you think this disruption changed populations of other animals? *Increased competition with native species for food and space, preying on native species which decreases their population.*

Piedmont & Mountains Gallery:

- Find one of the snake exhibits in the gallery. What role do snakes play in the food web? *Snakes tend to prey on small mammals such as mice and rats. Rodents populate very quickly and can get out of hand so snakes keep their populations at a healthy level.*

World of Darkness:

- Find the decomposer exhibit. What are decomposers and what is their role in the food web? *Decomposers break down decaying organisms. They turn the decaying organisms into simpler, inorganic materials for primary producers to use, like nutrient rich soil.*

Cypress Swamp Gallery:

- Observe all of the living species in the habitarium. What are some examples of producers and consumers? What are some ways that the producers and consumers interact? *Producers are any of the plants. Consumers are any of the animals. Some consumers eat producers as their primary food source. Producers create oxygen for the consumers to breathe while the consumers make carbon dioxide for the producers.*
- Looking at the producers in the habitarium, what is a producer and explain what they do? Where are producers on the food web? *A producer is an organism that goes through a process called photosynthesis in order to create their own food. Producers are at the very start of a food web.*

VA Underground:

- Fossil evidence found on the York River shores tells us Virginia was covered by a shallow marine sea millions of years ago. This habitat supported corals and other aquatic species. Can you observe any symbiotic relationships in this coral exhibit? *Yes! Reef corals tend to have a mutualistic relationship with photosynthetic cells called zooxanthellae. Also, some fish hide in corals for protection while helping to clean away debris on the coral.*



ANSWER KEY:

Mountain Cove Gallery:

- The food web in a mountain stream depends heavily on outside sources of organic matter to fall or wash into the stream. What could be some examples of organic matter that could help the food web? *Leaves, woody debris, animal material*

Conservation Command Center:

- Take a look at the trash fish tank near the front of the exhibit. It represents what happens when humans litter and use single use plastics. In what ways does this affect populations of animals and what are some ways we are able to help? *Animals can ingest plastics which can cause them to become ill and not get the necessary nutrients. Animals can also get entangled in debris making it hard to swim or return to their normal behaviors. We can help by reducing the amount of plastics we use in our everyday lives. Refusing single use plastics like straws and using reusable products like water bottles.*

Outdoor Trail:

- Coyotes are considered to be “agricultural pests” due to their place in the food web. Why do you think that is? *Coyotes can be known to prey on various livestock but also consume some crops off of farms.*

