

## Elementary School Education Programs

### ***Animal Sense***

Grades PreK-1:

Students discover extraordinary animal senses through a discussion about the ways some animal ambassadors experience the world. The focus is on animal senses and how they compare to the 5 human senses.

SOLs: Virginia Science Foundation Blocks for Early Learning: Block 1- Scientific investigation, logic and reasoning, K.2, K.4, 1.1

### ***The Five Senses***

Grades PreK-1:

Students explore and learn about the five senses by experiencing the sensations of sight, hearing, smell, and touch through hands on activities. \*Taste is discussed but not tested to avoid the risk of possible sensitivities or allergic reactions.

SOLs: K.1, K.2, K.4, 1.1

### ***Science Toys***

Grades PreK-1:

Students “experiment” with toys to observe and explore the science of what makes them work. –A fun introduction to forces, motion, and energy.

SOLs: K.1, K.3, K.4, 1.1, 1.2

### ***Animal Needs***

Grades PreK-2:

Students discuss the things animals need to survive whether they live at a museum, in a house, or in the wild. Get up close and personal with some of the museums living collection and examine their habitats. Find out how their needs are being met.

SOLs: Virginia Science Foundation Blocks for Early Learning: 4- Life Processes, K.7, 1.5. 2.5

### ***Dig It!***

Grades 1-5:

Become a paleontology detective! Explore the lives of prehistoric creatures and their habitats by studying both real and replica fossil clues, learning how they were formed and how scientists interpret them. Discover how the earth's surface, climate and different life forms have changed or disappeared over time. Have fun digging for fossils and trying to identify them!

SOLs: 1.5, 1.7, 2.5, 3.5, 4.5, 5.7

### ***Habitats***

Grades 1-4:

Animals live in a wide variety of habitats. In each of these unique locations, animals can meet all of their needs. Meet animals from a wide array of different habitats and discuss what those habitats look like. Join an educator in examining some similar animals up close and determining the habitats in which they live!

SOLs: 1.5, 1.7, 2.5, 2.7, 3.4, 3.5, 4.5

### ***Food Chains***

Grades 3-4:

Explore some of the food chains and webs which include museum animals; both in the museum and in the wild. Students examine food chains and meet all of the components of one food chain.

SOLs: 3.5, 4.5

### ***Physical Properties and Physical Changes of Matter***

Grades 2-3:

Students observe and compare mass, volume, and other physical properties of different examples of matter through simple experiments and investigate what causes matter to change states (phases).

SOLs: 2.1, 2.3, 3.1, 3.3, 3.9

### ***Wildfire***

Grades 2-5:

Explore both the dangers and ecological importance of natural wildfires. Learn about the fire triangle, fire safety both in and outside the home, and how animals and plants survive and even depend on periodic wildfire through various natural adaptations. Older students may conduct experiments and interact with computer simulations to investigate the effects of different weather and related environmental conditions on fire behavior.

SOLs: K.9, 1.7, 2.5, 2.7, 2.8, 3.6, 3.10, 4.5, 4.8

### ***Super Ball Science***

Grades 3-5:

Students will use the scientific method, make a hypothesis, and determine controls and variables as they design and create their own “homemade” bouncy balls. They will then work together to design an experiment to test their bouncy balls against some store-bought super balls.

SOLs: 3.1, 4.1, 5.1

### ***Adaptations***

Grades 3-5:

Have you ever wondered how animals can survive in such diverse habitats? Visit with our living collection and learn more about the amazing adaptations that our animals survive in the wild.

SOLs: 3.4, 4.5, 5.5

### ***Amazing Light***

Grade 5:

Students use various lenses, mirrors, CDS, lasers, spectrosopes, and other materials to investigate and observe the amazing properties of light energy and how reflection, refraction, and diffraction can change how we see things. Students also learn how visible light is related to other forms of electromagnetic energy and have fun experimenting with “black light” and fluorescence.

SOLs: 5.3, 5.4