Science Standards of Learning and

Project WILD Activities Grades K-6

### **The Nature of Science**

*“Science is not a mere accumulation of facts; instead, it is a discipline with common practices for understanding the natural world.”*  The 2018 Virginia Science Standards of Learning uses themes in grades K – 6th grade to help build on the understanding of the natural world around them. The correlation below shows which Project WILD activities will help the teacher build on the theme for that grade level. Additional activities will also support the themes but were not listed because the connection to the objectives for that grade level were not as strong.

***Kindergarten – Using my senses to understand my world.***

*“In science, kindergarten students use their senses to make observations of the characteristics and interactions of objects in their world. Students study the characteristics of water and the basic needs of living things. They also study the relationship between the sun and Earth through shadows and weather. They determine how their actions can change the motion of objects and learn how they can make a difference in their world.”*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Growing Up WILD Guide** |
| My Kingdom for a Shelter | icon depicting science and engineering practiceAre You Me?  | Less is More |
| Insect Inspection | Water Safari | Looking at Leaves |
| Ants on a Twig |  | Wildlife is Everywhere |
| Seed Need |  | Hiding in Plain Sight |
| icon depicting science and engineering practiceColor Crazy |  |  |
| What’s That Habitat? |  |  |
| What You Wear is What They Were |  |  |

***Grade One - How I interact with my world.***

*In first-grade science, students become aware of factors that affect their daily lives. Students continue to learn about the basic needs of all living things and that living things respond to factors in their environment, including weather and the change of season. They continue the examination of matter by observing physical properties and how materials interact with light.*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Growing Up WILD Guide** |
| *Busy Bees, Busy Blooms* | Water Plant Art  | Lunch For a Bear |
| icon depicting science and engineering practice*Seed Need* | icon depicting science and engineering practiceFashion A Fish | Who Lives in a Tree |
| icon depicting science and engineering practiceColor Crazy | Aqua Words | Seed Need |
| icon depicting science and engineering practiceInsect Inspection |  | Show Me the Energy! |
| What’s That Habitat |  | In A Grasshopper’s World  |
| My Kingdom for a Shelter |  |  |

**Grade Two – *Change occurs all around us***

*“Science in second grade builds on the previous understandings of forces, water, weather, and plants and animals, and students explore these concepts through the lens of change. They examine how water changes phase, how visible and invisible forces change motion, how plants and animals change through their life cycles, and how weather changes the Earth. Students also examine how change occurs over a short or long period of time”.*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Growing Up WILD Guide** |
| Limiting Factors: How Many Bears?  | Are you Me? | Grow As We Go |
| icon depicting science and engineering practiceSurprise Terrarium | Silt: A Dirty Word | Aqua Charades |
| Busy Bees, Busy Blooms | Water Plant Art | Field Study Fun |
| What’s That Habitat? |  |  |

**Grade Three - *Interactions in our world***

*“The focus of science in third grade is interactions in our world. Students continue their study of forces and matter by learning about simple machines and by examining the interactions of materials in water. They also look at how plants and animals, including humans, are constantly interacting with the living and nonliving aspects of the environment. This includes how adaptations satisfy the life needs of plants and animals and the importance of water, soil, and the sun in the survival of plants and animals”.*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Flying WILD Guide** |
| Tracks | Marsh Munchers | Bird Behavior Scavenger Hunt |
| Adaptation Artistry  | Fashion A Fish | The Fine Art of Nesting |
| icon depicting science and engineering practiceThicket Game  | Designing a Habitat  | The Great Migration Challenge |
| icon depicting science and engineering practiceOwl Pellets | icon depicting science and engineering practiceEdge of Home |  |
| icon depicting science and engineering practiceQuick Frozen Critters | Got Water |  |
| Which Niche? | Water Wings |  |
| Urban Nature Search | Silt: A Dirty Word |  |

**Grade Four – *Our place in the solar system***

*“Our solar system is a grand place, and in fourth-grade science, students learn where we fit in this solar system. Starting with the solar system, and then moving to the planet Earth, the Commonwealth of Virginia, and finally their specific ecosystems, students examine how features of plants and animals support life. They also explore how living things interact with both living and nonliving components in their ecosystems”.*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Flying WILD Guide** |
| Trophic Transfer  | Got Water? | Hidden Hazards |
| icon depicting science and engineering practiceBusy Bees, Busy Blooms | Fashion a Fish |  |
| icon depicting science and engineering practiceSeed Need | Water Plant Art |  |
| icon depicting science and engineering practiceWhich Niche?  | Blue Ribbon Niche |  |
| Interview A Spider |  |  |
| Keeping Cool |  |  |

**Grade Five - *Transforming matter and energy***

*“Grade five science takes a deeper dive into foundational concepts in physical science as students begin to make connections between energy and matter. Students explore how energy is transformed, and learn about electricity, sound, and light. They also learn about the composition of matter and explore how energy can change phases of matter. They apply an understanding of force, matter, and energy when they explore how the Earth’s surface changes”.*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Flying WILD Guide** |
| Tropic Transfer  |  | Avian Acoustics: Sound Off |
| Lights Out |  |  |

## Grade Six - *Our world; our responsibility.*

“*In sixth grade, students are transitioning from elementary to middle school. The science standards support that transition as students examine more abstract concepts, providing a foundation in the disciplines of science. They explore the characteristics of their world, from the Earth’s placement in the solar system to the interactions of water, energy, air, and ecosystems on the Earth. As students more closely examine the use of resources, they also consider how their actions and choices affect future habitability on Earth”.*

**The following Project WILD activities support this theme:**

|  |  |  |
| --- | --- | --- |
| **Project WILD Guide** | **Aquatic WILD Guide** | **Flying WILD Guide** |
| Lights Out  | Water Works | icon depicting science and engineering practiceBird Action  |
| icon depicting science and engineering practiceWildlife and the Environment | Watershed | Council Consensus |
| Bat Blitz | Water Wings |  |
|  | Watered Down History |  |
|  | Net Gain Net Effect |  |

* Denotes that this activity also supports a Scientific and Engineering Practice in the Framework

The Virginia Department of Game and Inland Fisheries is the state sponsor for Project WILD. The Department provides professional development for formal and non-formal educators. From awareness to action, this hands-on approach to learning engages students in investigating the world around them, connecting them to conservation careers, and participating in solid STEM activities.



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