



# Activate Learning **PRIME**<sup>™</sup>

## Introducing a new K-5 Science Program

*For the Next Generation of Scientists and Engineers*

*The elementary-grades component of **Activate Learning K-8 Science***

A product of UChicago STEM Education, **Activate Learning PRIME**<sup>™</sup> is the result of a rigorous iterative development process by an author team comprised of both content and classroom specialists and is designed to be educative for elementary school teachers, as well as for students. Each unit—available in both print and digital formats—addresses the Next Generation Science Standards and interweaves each element of three-dimensional learning.

### **Instructional Design with Students in Mind**

**Activate Learning PRIME** engages students with phenomena-driven activities that encourage students to observe their surroundings and to make, express, and refine conclusions about the physical and natural world. **Activate Learning PRIME** promotes understanding of key science concepts while incorporating core learning goals in English Language Arts and Mathematics standards.

- Science Processes
- Critical-Thinking Skills
- Problem-Solving Strategies
- English Language Arts standards
- Mathematics Standards
- Science and Engineering Practices

The science inquiry activities provide a real-world context for mathematics and language skill development, resulting in more confidence and higher achievement.

### **Greater Focus on Engineering and Technology**

Activate Learning units integrate Engineering Design Projects at each grade level, providing students with opportunities to apply science concepts to engineering questions and problems. For example, in Grade 1 (*Light and Sound*), students build an instrument that can change volume and pitch. At Grade 4, students analyze the structure and function of a human joint, and then apply their understanding to designing a robotic arm that could collect samples on Mars (*Structures in Living Things*).

### **Digital Interactivity that Supports Classroom Discourse**

Hands-on materials, active discussions, and purposeful collaboration on all aspects of inquiry are interwoven in **Activate Learning PRIME**. Teachers are able to meet the challenge of ELA, Math and Science learning goals as the highly interactive learning environment facilitates all aspects of instruction.

## Next Generation Science Standards (NGSS) by Grade Level

Lower Elementary (K-2)	Upper Elementary (3-5)
<p style="text-align: center;"><b>Kindergarten</b></p> <ul style="list-style-type: none"> <li> Pushes and Pulls</li> <li> Plants and Animals</li> <li> Tracking the Weather</li> </ul>	<p style="text-align: center;"><b>Grade 3</b></p> <ul style="list-style-type: none"> <li> Forces in Action</li> <li> Changing Environments</li> <li> Patterns in Life Cycles</li> <li> Inheritance and Variation</li> <li> Weather and Climate</li> </ul>
<p style="text-align: center;"><b>Grade 1</b></p> <ul style="list-style-type: none"> <li> Light and Sound</li> <li> Examining Living Things</li> <li> Watching the Sky</li> </ul>	<p style="text-align: center;"><b>Grade 4</b></p> <ul style="list-style-type: none"> <li> Energy Transfers</li> <li> Technology and Energy</li> <li> Waves</li> <li> Structures in Living Things</li> <li> Our Geosphere</li> </ul>
<p style="text-align: center;"><b>Grade 2</b></p> <ul style="list-style-type: none"> <li> Solids, Liquids, and Gases</li> <li> Diversity in Habitats</li> <li> Land, Water, and Wind</li> </ul>	<p style="text-align: center;"><b>Grade 5</b></p> <ul style="list-style-type: none"> <li> Investigating Matter</li> <li> Ecosystems</li> <li> Earth's Systems</li> <li> Earth in Space</li> </ul>

**Modular units provide maximum flexibility.**

**Districts are able to develop a sequence that best meets their unique needs.**