

LAB-BASED PROGRAMS

Programs are listed by subject and grade level. Lab-based programs contain TEKS-aligned activities, support curriculum goals, and pair well with traveling exhibitions, films, and our 11 permanent exhibit halls.

NOTES

- Lab-based programs are available during Museum field trips, as denoted by
- Lab-based programs are available on your campus, as denoted by in
- All PreK-3-4 lab-based programs are designed for 25 students.
- All K-12 lab-based programs are designed for 30 students.
- All programs are 45 minutes in length unless noted otherwise.
- Lab times at the Museum: 10:30am, 11:30am, 12:30pm



PHYSICAL SCIENCE

Explore the physical world through chemistry, engineering, and physics. These programs feature exciting topics such as force and motion, matter and energy, and engineering and robotics.

PHYSICAL SCIENCES LABS

Field Trips: \$7 per student

On Your Campus: \$200 per program

SOLAR SUPERSTARS

(GRADES K-2) 🗮 💼

Students will explore light energy and learn about the importance of Sun safety. They will also investigate the effectiveness of sunscreen in blocking UV light. **TEKS:** Force, Motion, and Energy K.8A, 1.8A, 3.8A

ELECTRICAL EXPLORATION

(GRADES 3-5) 💼

Students will explore electrical circuits and learn about their application in our daily lives — including simple robots! From investigating open and closed circuits to comparing insulators and conductors, students will work in groups to light up and program unique creations.

TEKS: Force, Motion, and Energy 3.9A, 4.8B, 4.8C, 5.8B

ENGINEERS, ASSEMBLE!

(GRADES 3-5) 🗮 💼

In this team-based engineering challenge, students will engage in the engineering design process to create a structure capable of withstanding a simulated force. They will work together to design and construct their prototype, then test and improve their design as all engineers do! **TEKS:** Force, Motion, and Energy 3.7A, 4.7, 5.7B

WHAT'S THE MATTER?

(GRADES 3-5) 🗮 💼

Students will explore chemistry fundamentals, including physical properties of matter, mixtures and solutions, and exciting chemical reactions. This lab uses basic equipment while emphasizing laboratory safety.

TEKS: Matter and Energy 3.6A, 3.6B, 3.6C, 4.6A, 4.6B, 5.6A, 5.6B, 5.6C

CHEMISTRY DETECTIVES

(GRADES 6-8) 🗮 💼

Students will investigate physical and chemical changes in matter to identify an unknown substance. They will use their findings to help solve a mystery at the Museum.

TEKS: Matter and Energy 5.6A, 6.6E, 7.6C

CRASH TEST CARS

(GRADES 9-12) 🗮 💼

Vehicle safety features, physics, and engineering collide in this lab! Your students will test their knowledge and apply their skills to keep an egg passenger safe in a "high-speed" crash. **TEKS:** IPC.5C, PHY.5E, PHY.5G





LIFE SCIENCES

Explore the diversity of life on Earth through our exciting, hands-on life science programs. Your students will discover topics such as adaptations, life cycles, and dissections.

LIFE SCIENCES LABS

Field Trips: \$7 per student On Your Campus: \$200 per program LIFE SCIENCES LABS (DISSECTIONS)

Field Trips: \$8 per student On Your Campus: \$250 per program

AMAZING ANIMALS

(GRADES PK3-PK4) 🗮 💼

Animals are amazing! We will learn about animals that live in all sorts of environments, all around the world. Animals are just like us: They move, eat, and use their senses! Let's learn more about some unique animals using our bodies and senses!

Guidelines: VI.B.1, VI.B.3, V.E.1, IX.A.2

DO BUGS BUG YOU?

(GRADES K-2) 🚝 💼

There are lots of bugs in the world, but not all of them are insects. Your students will explore insect characteristics, their basic needs, and how they fit into the animal kingdom. **TEKS:** Organisms and Environments K.12B, K.13B, 1.13A, 1.13B, 2.13B, 2.13D

ADAPT TO SURVIVE 2.0

(GRADES K-5) 🚞 💼

Investigate ecological clues and signs left behind by nature to help understand how animals have physically and behaviorally adapted to survive in their habitats — and thrive!

TEKS: Organisms and Environments 2.13A, 3.13A, 5.13A

DISSECTION: BRAIN POWER

(GRADES 6-12) 🗮 💼

Gain insight on basic brain anatomy and function through a guided dissection of a sheep's brain. Working in pairs, students will uncover how the brain controls all our bodily functions and how sheep's brains compare to human brains. **TEKS:** Organisms and Environments 7.13A | Anatomy and Physiology AP.11C, AP.11D

DISSECTION: THE HEART OF THE MATTER

(GRADES 6-12) 🚞 💼

Students will work in pairs in this guided dissection of a sheep's heart to learn about the structure and function of a mammal's heart, as well as how oxygen, nutrients, and hormones are transported throughout the body.

TEKS: Organisms and Environments 7.13A | Anatomy and Physiology AP.14A, AP.14C

DISSECTION: MORE THAN MEETS THE EYE

(GRADES 6-12) 🗮 💼

Students will work in pairs in this guided dissection to gain a better understanding of vision by exploring the basic structures of a cow's eye, how the parts work together, and its connection to the brain.

TEKS: Organisms and Environments 7.13A | Anatomy and Physiology AP.11C, AP.11D







EARTH AND SPACE SCIENCES

Earth and space science includes numerous fields of study that examine this planet and beyond. Programs in this area focus on weather, fossils, plate tectonics, rocks, and minerals.

EARTH AND SPACE LABS

Field Trips: \$7 per student

On Your Campus: \$200 per program

EARTH ROCKS

(GRADES PK3-PK4) 🂼

Our Earth is a planet of possibilities. Join us as we discover what makes our Earth unique and then explore different ways that we can protect it and take care of its water and land. **Guidelines:** VI.B.3, VI.C.1, VI.C.4, V.E.1, VIII.A.1

SPACE EXPLORERS

(GRADES PK3-PK4) 🚞 💼

Have you ever looked into the sky and wondered what is up there? Higher than the birds, past the clouds, and farther than the Moon, a whole universe of objects spins in outer space. Let's imagine that we can leave Earth behind and explore the solar system that surrounds us.

Guidelines: IV.A.1, V.C.2, V.E.3, VIII.A.1

DIG THOSE DINOS

(GRADES K-2) 🗮 💼

Students will discover fossils, follow dinosaur tracks, and piece together prehistoric clues in this station-based program. They will also explore the minerals that make up fossils and sort them.

TEKS: Earth and Space K.10A, 1.6A | Organisms and Environments K.13B, 1.13A, 2.13B, 3.12D

AIR AND WEATHER

(GRADES 3-5) 💼

As aspiring meteorologists, students will explore the driving factors of weather — the air, the Sun, and the water cycle — as well as observe, measure, and predict weather. **TEKS:** Earth and Space 3.10A, 4.10A, 4.10C, 5.10A

PUZZLING OUT THE PAST

(GRADES 6-8) 🂼

Students will work as a team of geologists to examine evidence and engage in a hands-on experiment to investigate the processes of plate tectonics and their effect on the Earth's surface.

TEKS: Earth and Space 6.10B, 7.10A, 7.10B

