

East Tennessee Discovery Center Fieldtrip Program Guide 4th Grade

Scheduling Your Fieldtrip!

Call 865-594-1494 to schedule your fieldtrip. Please provide the following information:

1. Date & time you would like to visit.
2. Name, address, & phone number of your school.
3. The number of students participating.
4. Programs you would like to see.
A fieldtrip consists of a classroom program, planetarium show, and time in the exhibit gallery (this may include a scavenger hunt) or any combination of the above.
5. Whether your group will be shopping in our gift shop (prices range from 25 cents to \$10).

Meeting Your Curriculum!

Every Discovery Center program is aligned with and reinforces the grade level expectations set by the Tennessee Department of Education. Included is a list of programs and the state science curriculum grade level expectations they meet.

Health standards are aligned with the Knox County Board of Education Health and Wellness curriculum.

* Indicates that the particular program best aligns with the GLEs for that grade level.

Planetarium Programs

***Weather Machine**

Learn about common weather elements on Earth and how they affect our weather patterns. Topics include wind, clouds, tornadoes and hurricanes. Hear how these elements of Earth's weather compares to the weather on other planets. Narrated in part by WATE-TV6's chief meteorologist Matt Hinkin.

7.6.1 Analyze patterns, relative movements, and relationships among the sun, moon, and earth.

7.8.1 Recognize the major components of the water cycle.

7.8.2 Differentiate between weather and climate.

Planet Talk

Students learn the basic characteristics of each planet in the solar system. Planets are compared and grouped into broad categories. After learning the scoop about Pluto, the students take a "spaceship ride" back to Earth.

7.6.1 Analyze patterns, relative movements, and relationships among the sun, moon, and earth.

The Sky Tonight

Join our Planetarium Facilitator in viewing a simulated nighttime sky projected on the planetarium dome. Find the stars and constellations that are currently visible in the nighttime sky and hear the stories of how some constellations got their names. This interactive program can be tailored to meet the needs of your students.

7.6.1 Analyze patterns, relative movements, and relationships among the sun, moon, and earth.

Classroom Programs

***Bats Abound**

Truth versus myth about bats from around the world! See native Tennessee bat skins. View a real bat skeleton and compare the similarities to the human skeleton. Participate in age-appropriate activities that will have your students "flying".

7.3.2 Investigate different ways that organisms meet their energy needs.

- 7.4.1 Recognize the relationship between reproduction and the continuation of a species.
- 7.5.1 Analyze physical and behavioral adaptations that enable organisms to survive in their environment.

***Forces & Motion**

Discover the role “friction” and “gravity” plays in our daily lives. Through participatory and fun activities such as racing cars, hitting homers, and riding a skateboard, students will grasp the concepts of Newton’s Three Laws of Motion.

- 7.11.2 Design a simple investigation to demonstrate how friction affects the movement of an object.
- 7.11.3 Investigate the relationship between the speed of an object and the distance traveled during a certain time period.

***Our Planet & Moon**

Through imitation, students learn the movement of the Earth and Moon and how the Earth’s movements create day and night and four seasonal changes. Participatory and fun activities help students understand the “phases” of the Moon as well as the Moon’s physical features.

- 7.6.1 Analyze patterns, relative movements, and relationships among the sun, moon, and earth.

***Wind, Water, Clouds and More**

Learn the whys behind Summer, Winter, Spring, and Fall. What is wind and what does it do? How many types of clouds are there and what sort of precipitation do they create? What’s the difference between Fahrenheit and Celsius? Come to our “weather room” and get the answers.

- 7.8.1 Recognize the major components of the water cycle.
- 7.8.2 Differentiate between weather and climate.

***Flip the Switch**

“Flip the switch” on learning about electricity! What makes a light bulb “light”? What makes a magnet “dance”? What creates the “shock” we feel when we touch certain objects? Learn the whys behind these questions through hands-on experiments and activities. Learn how power is generated and electricity is harnessed in our homes.

- 7.12.1 Explore the interactions between magnets.
- 7.12.2 Observe that electrically charged objects exert a pull on other materials.
- 7.12.3 Explain how electricity in a simple circuit requires a complete loop through which current can pass.

***Light & Stars**

Investigate the properties of light, the color spectrum, and explore what happens when colors of light are mixed. Students will determine, through experimentation with different materials, which materials are “translucent”, thus allowing light to pass through them. Various mediums will be used to demonstrate light “refraction”. The use of “diffraction-lens glasses” will allow students to examine “glowing gases”, the same way astronomers do when studying the stars.

7.10.2 Investigate how light travels and is influenced by different types of materials and surfaces.

***From Cells to Systems**

Did you know there are “trillions” of cells in the human body and each cell has a specific function and purpose? Come explore the human body, while viewing real “preserved” human organs. Learn the chain of events from cells to organs to body systems and the how's behind the process.

7.1.1 Recognize that cells are the building blocks of all living things.

Health Standard 2 The student will understand the role of body systems as related to healthful living.