



east tennessee
DISCOVERY CENTER

Program Resource Guide 2007-2008 9th-12th Grade



SCIENCE
DISCOVERY

Science Discovery Center

516 N. Beaman Street/P.O. Box 6204
Knoxville, TN 37914

Located in Chilhowee Park near the Zoo
(865) 594-1494

Science Discovery Center General Scheduling Information

Call (865) 594-1494 to schedule Science Discovery programs for a group of 10 or more. Small groups of 10 or less may schedule programs at a cost of \$40.

Location

516 N. Beaman Street (in Chilhowee Park next to Knoxville Zoo)
Knoxville, TN 37914

Hours

Monday-Friday 9:00 a.m.—5:00 p.m.
Saturday 10:00 a.m.—5:00 p.m.

Group Rates for Field Trips

School-age children/adults	\$4
Preschool children	\$3
Knox Co. Public School groups	\$3
Outreach Programs	\$4 + mileage invoice

No charge for teachers & bus drivers accompanying a school group; other adult chaperones admitted free within a ratio, depending on the age of the students.

Gift Shop

Our gift shop sells science-related items including rocks, minerals, star charts, insects, magnets, pencils and more. Prices start at 25 cents.

Barrier-Free Facility

All areas at the Science Discovery Center are handicap accessible. If your group has special needs, please let us know beforehand.

Knox County Science Curriculum Instructional Goals

Every Science Discovery Center program has been specifically developed to reinforce the instructional goals of the Knox County School System. We have included the instructional goals met by each program to assist you in planning your trip. For a full description of these instructional goals, visit our website at www.etsdiscovery.org and click on the science goals link.

Science Discovery Center In-House Programs

Planetarium Programs

The Sky Tonight Grades 9-12

30 minutes

Join our Planetarium Facilitator for a simulated look at the nighttime sky. Learn how to find the stars and constellations that are currently visible in our evening sky, and hear the stories of how some of these constellations got their names. This live program can be tailored to the needs and interests of your students.

The Universe Grades 9-12

45 minutes

Students learn about solar systems, galaxies and the Universe as a whole in a slide presentation led by our Planetarium Facilitator. The life cycle of stars will be discussed, from the formation of a star to the objects that come from the death of a star. *Meets Knox County Earth Science Curriculum Instructional Goals 1a & 1c in Astronomy unit.*

Worlds of Wonder Grades 9-12

35 minutes

This is a planetarium adventure which travels through the planets in our solar system. Planet sizes, temperatures, orbital periods, rotation and moons are compared. Asteroids and the development of comets are also discussed. *Meets Knox County Earth Science Curriculum Instructional Goals 1a, 1b & 1e in Astronomy unit.*

Weather Machine Grades 9-12

45 minutes

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. *Meets Knox County Earth Science Curriculum Instructional Goals 1b, 1c & 1f in Astronomy unit; goal 2d in Essential Science Process Skills.*

Science Discovery Outreach Programs

The following Outreach programs can be scheduled to come out to your classroom as an alternative to an off-campus field trip.

Lego Outreach Programs

Lego 2 Grade 9

90-105 minutes

Advanced principles of mechanical power transmission are taught along with properties of gears. Students will build mechanical machines using Lego's most advanced Technic II sets. *Meets Knox County Physical Science Curriculum Instructional Goals 2a-b in Mechanics unit.*

Starlab Outreach Programs

Starlab is a portable, inflatable planetarium that brings the nighttime sky to your school. The "sky" projects inside an inflatable dome where students investigate the stars and constellations. **Starlab requires 22x22 feet of floor space and an 11-foot ceiling.** Starlab can accommodate up to 20 9th-12th graders at a time.

Multicultural Mythologies Grades 9-12

45 minutes

Many cultures around the world imagined star patterns in the sky, and told stories about the star patterns. Most people are familiar with the star myths told by Greeks, but many other cultures told stories which helped explain the star patterns to their societies. Students will see the star patterns as the Greeks saw them, but will hear stories about the star patterns as other cultures viewed them.

Starry Skies Grades 9-12

45 minutes

Students learn to locate constellations and get tips on how to identify each constellation in the proper season. Stories about stars and constellations give clues to their names and locations.

Plate Tectonics Grades 9-12

45 minutes

Activities reinforce principles of plate tectonics. Students learn about volcanoes, earthquakes, and other effects of crustal movement. *Meets Knox County Earth Science Curriculum Instructional Goals 1a-f in Earth's Structure unit.*