Eighth Grade South Carolina Programs

MONTHLY PROGRAM PAIRINGS

<table>
<thead>
<tr>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER &amp; JANUARY</th>
<th>FEBRUARY &amp; MARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Cosmic Colors</td>
<td>*Cosmic Colors</td>
<td>*Cosmic Colors</td>
<td>*Cosmic Colors</td>
</tr>
<tr>
<td>Minerals, Ores &amp; Fossil Fuels</td>
<td>Lunar Design Challenge</td>
<td>Kinesthetic Astronomy</td>
<td>Kinesthetic Astronomy</td>
</tr>
<tr>
<td>Radioecology</td>
<td>Minerals, Ores &amp; Fossil Fuels</td>
<td>Lunar Design Challenge</td>
<td>Lunar Design Challenge</td>
</tr>
<tr>
<td>Rockin’ &amp; Rollin’</td>
<td>Rockin’ &amp; Rollin’</td>
<td>Seafloor Surveyors</td>
<td>Force &amp; Motion</td>
</tr>
</tbody>
</table>

PLANETARIUM PROGRAMS

COSMIC COLORS Months offered: OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY & MARCH

Cosmic Colors will take you on a wondrous journey across the electromagnetic spectrum. Discover the many reasons for color – like why the sky is blue and why Mars is red. Take a tour within a plant leaf and journey inside the human eye. Investigate x-rays at your doctor’s office and at a monstrous black hole. Get ready for an amazing adventure under a rainbow of cosmic light! Standards: 8.P.3A.1, 8.P.3A.3, 8.P.3A.5

DISCOVERY PROGRAMS

FORCE & MOTION Months offered: FEBRUARY & MARCH

Students will conduct investigations to distinguish between force and work, and mass and weight. They will demonstrate how simple machines such as levers, pulleys, and inclined planes reduce the amount of force needed to do work.


KINESTHETIC ASTRONOMY Months offered: DECEMBER, JANUARY, FEBRUARY & MARCH

Students get a feel for the scale of the universe as they sort celestial objects; then they model the Earth, Moon and Sun. They will discover why stars appear to move across the sky each day/night, why we see different stars during the year and how Earth’s tilt causes seasons.

Standards: 8.E.4A.1, 8.E.4B.1

MINERALS, ORES & FOSSIL FUELS Months offered: OCTOBER & NOVEMBER

Students learn to identify minerals by examining key properties of museum quality specimens; then they identify 10 unknown minerals using a dichotomous key. Valuable products made from Earth resources are discussed throughout the program.

Standards: 8.E.5A.1, 8.E.5A.2

LUNAR DESIGN CHALLENGE Months offered: NOVEMBER, DECEMBER & JANUARY

Students will design, build, and test a Lunar Buggy to transport astronauts and cargo on the Moon. They will collect and analyze data, take measurements, and refine their models using the Engineering Design Process.


 RADIOECOLOGY Month offered: OCTOBER

Learn what happens when radionuclides and ecosystems meet with the Savannah River Ecology Laboratory scientists. The SREL has the only radioecology undergraduate education program in the world. Challenge the myths and learn the facts about radioecology from research conducted at the SRS in Aiken, South Carolina, the Chernobyl Exclusion Zone in Russia, and the Fukushima Daiichi accident in Japan.

Standards: 8.E.6B
ROCKIN’ & ROLLIN’  Months offered: OCTOBER & NOVEMBER
Students observe excellent specimens of igneous, sedimentary and metamorphic rocks. They compare physical properties, relate properties to formation processes, and examine sand derived from various rocks. They also classify fossils and products of Earth resources. Standards: 8.E.5A.1, 8.E.5A.4, 8.E.5A.5

SEAFLOOR SURVEYORS  Months offered: DECEMBER & JANUARY
Join us for a deep-sea mapping expedition that reveals connections between landforms and plate tectonics. Students use sounding probes, look for patterns, and make inferences about the landforms in a 5’ by 7’ scale model of the region from 0’ to 22˚ N and 35˚ to 65˚ W. Students discuss constructive and destructive forces and compare the worldwide distribution of earthquakes and volcanoes to plate boundaries. Standards: 8.E.5A.4, 8.E.5A.5, 8.E.5B.1, 8.E.5B.2