



# Fourth Grade South Carolina Programs

## MONTHLY PROGRAM PAIRINGS

AUGUST, SEPTEMBER & OCTOBER	DECEMBER & JANUARY	FEBRUARY, MARCH & APRIL
*Two Small Pieces of Glass OR Cosmic Colors OR Who Discovered America? Do You See, What I See? Dodo Does Math Lunar Design Challenge	*Two Small Pieces of Glass OR Cosmic Colors Planet Earth Rocks Under the Sea	*Two Small Pieces of Glass OR Cosmic Colors Vertebrate Taxonomy Circuit City Dodo Does Math

## PLANETARIUM PROGRAMS

### TWO SMALL PIECES OF GLASS Months offered: AUG., SEPT., OCT., DEC., JAN., FEB., MAR. & APRIL

Join two young people at a star party as they observe planets and stars in a telescope. Learn how the telescope has changed from a modified spyglass using two small pieces of glass to the huge, space and land-based devices of today. Standards: 4-PS4-2, 4-PS4.B, 4-LS1-2, 4-LS1.D

### COSMIC COLORS Months offered: AUG., SEPT., OCT., DEC., JAN., FEB., MAR. & APRIL

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: 4-PS4-2, PS4.B

### WHO DISCOVERED AMERICA? Months offered: AUGUST, SEPTEMBER & OCTOBER

Students will explore celestial navigation techniques, such as using kamals (used by Arabic and North African sailors) and quadrants to measure the altitude angle of the North Star to determine latitude. We will learn how compasses and celestial events, such as a lunar eclipse, can be used to determine how far east of west one has traveled on Earth. We will uncover details related to Columbus’ voyage to North America and about other peoples who discovered America even before Columbus. Standards: 4.E.3A.2, 4.E.3A.3, Social Studies 4-1.3, 4-1.4

## DISCOVERY PROGRAMS

### CIRCUIT CITY Months offered: FEBRUARY, MARCH & APRIL

Students will utilize batteries, light bulbs, wires, and motorized fans to construct multiple circuits. They will explore the difference between simple and series circuits along with the effect of switches. Standards: 4-PS3-2, 4-PS3-4, PS3.A, PS3.B

### \*NEW DODO DOES MATH Months offered: FEBRUARY, MARCH & APRIL

Students will learn how to write real code while completing various math challenges including measurement, addition, subtraction, and computational thinking to help a dodo find her missing eggs! Standards: 4.AP.1.1, 4.AP.2.2, 4.AP.4.1, 4.AP.4.2, 4.NSBT.4, 4.MDA.2

### DO YOU SEE WHAT I SEE? Months offered: AUGUST, SEPTEMBER & OCTOBER

Students will explore ways that light can be reflected, refracted, diffracted and absorbed by various objects. They will also investigate how the eye converts light into images. Standards: 4-PS4-2, 4-PS4.B, 4-LS1-2, 4-LS1.



# Fourth Grade

## SC Programs Continued...

### DISCOVERY PROGRAMS

#### **LUNAR DESIGN CHALLENGE** Months offered: AUGUST, SEPTEMBER & OCTOBER

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. Standards: 4-PS3-1, PS3.A, 4-PS3-3, ETS1.A, ETS1.B, ETS2.B

#### **PLANET EARTH ROCKS** Months offered: DECEMBER & JANUARY

Students will explore excellent specimens of igneous, sedimentary and metamorphic rocks. They will compare physical properties relating properties to formation processes as well as observe and classify fossils, sediments and products of earth resources. Standards: 4-ESS1-1, 4-ESS2-1

#### **VERTEBRATE TAXONOMY** Months offered: FEBRUARY, MARCH & APRIL

Students will participate in hands-on taxonomy activities as well as take a look inside the 5 groups of vertebrates using x-ray images. They will interact and observe live animals including salamanders, frogs/toads, turtles, snakes, an alligator, and an owl. Standards: 4-LS1-1, LS1.A, 4-LS1-2, LS1.D

#### **UNDER THE SEA** Months offered: DECEMBER & JANUARY

In this deep-sea mapping expedition, students use depth probes, look for patterns, make inferences and map the ocean floor using a large 3D Landforms Puzzle. They compare continental landforms with oceanic landforms, discuss constructive and destructive processes, and discover connections between landforms and plate tectonics. Standards: 4-ESS2-2, 4-ESS2.B, 4-ESS3-2