



Fourth Grade South Carolina Programs

MONTHLY PROGRAM PAIRINGS

SEPTEMBER & OCTOBER	NOVEMBER & DECEMBER	MARCH & APRIL
*Magic Treehouse: Space Mission, *Two Small Pieces of Glass OR *Who Discovered America? Do You See, What I See? Sound-sational	*Magic Treehouse: Space Mission OR *Two Small Pieces of Glass Kinesthetic Astronomy Lunar Design Challenge	*Magic Treehouse: Space Mission OR *Two Small Pieces of Glass Introduction to Coding Vertebrate Taxonomy Walk Across the Solar System

PLANETARIUM PROGRAMS

MAGIC TREEHOUSE: SPACE MISSION **Months offered: SEPT., OCT., NOV., DEC., MAR. & APRIL**

Travel with brother-sister duo, Jack and Annie, in their Magic Tree House as they discover a note that asks them to answer six questions about space. With the help of an astronomer, the Internet, an astronaut, books and the writer of the mysterious note, we go on a wonderful journey of adventure and learning. This beautifully produced show is based on the beloved Magic Treehouse book series. Standards: 4.E.3A.1, 4.E.3B.1, 4.E.3B.2, 4.E.3B.3, 4.E.3B.4

TWO SMALL PIECES OF GLASS **Months offered: SEPT., OCT., NOV., DEC., 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.E.3A.3

WHO DISCOVERED AMERICA? **Months offered: 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

DO YOU SEE WHAT I SEE? **Months offered: 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.P.4A.1, 4.P.4A.3, 4.P.4A.4, 4.P.4A.5

INTRODUCTION TO CODING **Months offered: MARCH & APRIL**

Students will explore the fundamentals of coding through hands on activities. As a team students will build, collect data and complete various tasks through the coding process. Standards: 4.AP.1.1, 4.AP.3.1, 4.AP.3.2, 4.AP.4.1, 4.AP.4.2

KINESTHETIC ASTRONOMY **Months offered: NOVEMBER & DECEMBER**

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: 4.E.3A.1, 4.E.3A.2



Fourth Grade

SC Programs Continued...

DISCOVERY PROGRAMS

LUNAR DESIGN CHALLENGE Months offered: NOVEMBER & DECEMBER

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.S.1A.1, 4.S.1A.2, 4.S.1A.3, 4.S.1B.1

SOUND-SATIONAL Months offered: SEPTEMBER & OCTOBER

Students will learn about sound waves and how volume and pitch may be manipulated. They will use teamwork to construct their own musical instruments and play a song. Standards: 4.P.4B.1, 4.P.4B.2

VERTEBRATE TAXONOMY Months offered: 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.L.5A.1, 4.L.5B.3

WALK ACROSS THE SOLAR SYSTEM Months offered: MARCH & APRIL

Students learn about the planets and the size of the solar system as they create a model of the solar system using a scale of 1 inch = 100,00 miles. This requires walking outside for about a mile, so **please wear appropriate shoes!** Standards: 4.E.3A.1, 4.E.3A.3, 4.E.3B.4