

STEM

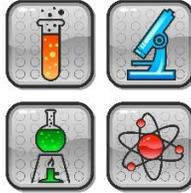
Montessori Style

Discovery Montessori Academy

Summer 2016

Session 1: May 31-June 10, 2016

Science: Seeds and Cycles



In this session the children will start the summer learning the skills of scientific observation and research and the scientific method. The first week of the session will be devoted to botany. We will have time to plant in garden beds and in indoor containers. We will explore photosynthesis and examine plants from the roots up. During this session we will explore the life cycles of a few living creatures---butterflies, ladybugs, and humans. We will also discuss Rachel Carson, marine biologist and environmentalist. The second week of this session we celebrate the birthday of Dr. Charles Drew (June 3) and discuss his contributions in the field of blood preservation and storage. We will end this session by hosting the American Red Cross for a community blood drive and a Trike-a-thon to benefit St. Jude's Children's Research Hospital on Friday, June 10 beginning at 9:00 am.

Session 2: June 13-June 24, 2016

Technology: Telegraphs, Typewriters, Tape Players, *Oh my!*



This session we consider the revolution of the Age of Technology, and explore how technology has changed, and progressed through the years. From the printing press and switchboards to computers and fiber optics---students will learn about the ways humans have communicated through the years. We explore the contributions to technology of Ada Lovelace and Alexander Graham Bell. Students will also create a technology timeline.

Session 3: June 27-July 8, 2016

Engineering: Gizmos and Gadgets



Designing, thinking, rethinking, redesigning----such is the life of an engineer! In this session students will learn the Engineering Design Process, and explore the reasons behind each aspect of the process. Students will explore gravity, magnetism, build several items related to gears, pulleys, and propellers. Additionally, students will collaborate in “engineering teams” to create a design that floats, sinks, or flies. Students will also explore the lives and inventions of Rube Goldberg, Henry Ford, Frank Lloyd Wright, and the Wright brothers.

Session 4: July 11-July 22, 2016

Mathematics: Marvelous Mathematics by Maria Montessori



We are delighted to celebrate this session with our very own amazing Montessori Mathematics materials. The Montessori Math materials cover wide ranges of mathematical concepts. From the development of understanding a sequence with Imbucare Boxes in the Nido Community, to the Upper Elementary exploration with the Pythagorean Theorem---daily children in a Montessori environment explore the intricacies and nuances of the world of Mathematics in phenomenal, concrete and exciting ways. We also learn about M.C. Escher and Albert Einstein

Elementary Camp Extensions:

In addition to the above outline, students in the Elementary Camp will create a solar system, constellations, make a sundial, explore food science and conduct experiments with temperature. Students will research and make presentations on notable scientists. They will also do weekly Science Laboratory Experiments for the Primary children. A more detailed list of activities for Elementary Camp will be provided at the beginning of each Elementary Camp session.

