2017-2018 Academic Year STEM Enrichment

Olive Children Foundation & Berkeley Academy has a new lineup of Science & Math Enrichment classes for the 2017 – 2018 school year! Our goal is to prepare students for success in a variety of STEM subjects, and to empower students to be successful in learning. Weekly homework help sessions combined with quality teaching in small groups makes the STEM Enrichment program ideal for students in Grades 6-8 looking to get ahead on schoolwork or improve academically.

Objective To enhance students' understanding of STEM subjects in alignment with school curriculum, and to better prepare students for deeper learning and academic success.

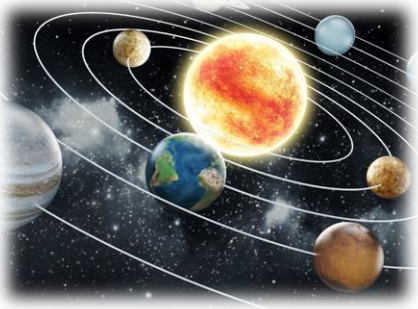
Tuition $150 per month. Includes four 1.5-hour sessions.

Homework Additional practice problem sets and/or homework is made available for students enrolled in the STEM enrichment program. Practice worksheets will be corrected with detailed feedback on a weekly basis.

Test Prep Students will be assessed regularly for understanding of material. Each week's class topics will be coordinated in alignment with curriculum from school to give students a review of recent material and a preview of upcoming material. Weekly take-home practice tests will be assigned for completion at home and reviewed in class.

Resources Additional reading excerpts, study guides, enrichment materials, educational videos, etc. are made available for enrolled students to use at home.

Instructors The Academic Year STEM Enrichment program is dedicated to providing top-notch teaching quality. Each class will be led by a qualified teaching assistant selected from a competitive group of applicants, and overseen by Olive's STEAM Director, Edward Njoo.



Questions or inquiries can be addressed to info@olivechildren.com.

For more information, contact:

Edward Njoo
STEAM Director & Tutoring Manager
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Class-Specific Information

Grade 6 Earth Science

Available in both Accelerated Track and Regular Track

Topics Covered:

- Earth's Surface & Structure
- Plate Tectonics
- Geology & Rock Cycle
- Landforms and Erosion
- Atmosphere
- The Solar System
- The Sun & Stars
- Water Cycle
- Natural Disasters
- Ecology & Population Dynamics
- Earth's Biomes
- Natural Resources
- Climate and Weather
- Volcanoes and Earthquakes
- Ocean & Wind Currents
- Seasons

Grade 7 Life Science

Available in both Accelerated Track and Regular Track

Topics Covered:

- Cell Structure & Function
- Microscopy
- Biological Molecules
- The Cell Cycle & Mitosis
- Genetics
- Plant Diversity & Biology
- DNA & RNA
- Evolution & Adaptation
- Taxonomy
- Animal Phyla
- Ecology & Ecosystems
- Viruses & Bacteria
- Population Dynamics
- Vertebrate (Human) Anatomy & Physiology
- Biotechnology

Grade 8 Physical Science

Available in both Accelerated Track and Regular Track

Topics Covered:

- Motion & Forces
- Newton's Laws
- Conservation of Energy
- Momentum & Impulse
- Work & Power
- Optics, Light, Sound
- Electricity & Magnetism
- Fluid Dynamics
- Waves & Harmonic Motion
- Molecules & Compounds
- Periodic Table of Elements
- Chemical Reactions
- Nuclear Chemistry
- Acids and Bases
- Solar System

Grade 6 Mathematics

Available in both Accelerated Track and Regular Track

Topics Covered:

- Multiplication & Division
- Order of Operations
- Introducing the Coordinate Plane
- Ratios and Rates
- Fractions
- Introduction to Variables
- Mathematical Models
- Properties of Operations
- Surface Area & Volume
- Classifications of Geometric Figures
- Mean, Median, Mode & Measures of Central Tendency
- Polygons & Triangles
- Probability
- Statistical Analyses
- Expressions and Equations

Grade 7 Mathematics

Available in both Accelerated Track and Regular Track

Topics Covered:

- Classes of Numbers
- Order of Operations
- Abstract Reasoning
- Inductive and Deductive Reasoning
- Sampling Data & Analysis Methods
- Multistep Equation Systems
- Equivalent Expressions
- Fractions
- Decimals & Percentages
- Scales and Ratios of Measures
- Interest, Tax, and Tip
- Circles, Circumference, and Pi
- Three-Dimensional Area and Volume
- Probability
- Two-data Sets

Grade 8 Mathematics

Available in both Accelerated Track and Regular Track

Topics Covered:

- Coordinate Plane Graphs
- Linear Equations
- Introduction to Functions
- Input & Output
- Slope of a Line
- Systems of Linear Equations
- Distances on the Coordinate Plane
- Applications of Linear Functions
- Applications of Systems of Equations
- Cones, Cylinders, Spheres
- Pythagorean Theorem & Basic Trigonometry
- Translations, Rotations, Dilations

Fall 2017 Schedule

Grade 6

NGSS Earth Science Enrichment	Common Core Math Enrichment
Saturday 1:30 PM – 3:00 PM	Saturday 3:00 PM – 4:30 PM
9/9 Our Dynamic Planet	9/9 Introduction
9/16 Plate Tectonics	9/16 Ratios and Fractions
9/23 Earthquakes	9/23 Percentages
9/30 Volcanoes	9/30 Number Systems
10/7 Minerals	10/7 Rational Numbers
10/14 Rocks & the Rock Cycle	10/14 Number Lines
10/21 Mapping Earth's Surface	10/21 Inequalities
10/28 Weathering & Soil	10/28 Proportionality
11/4 Erosion & Deposition	11/4 Expressions & Equations
11/11 Water on Earth	11/11 Word Problems
11/18 Freshwater	11/18 Solving Multistep Equations
11/25 Oceans & Ocean Zones	11/25 Inequality Expressions

Grade 7

NGSS Life Science Enrichment	Common Core Math Enrichment
Saturday 1:30 PM – 3:00 PM	Saturday 3:00 PM – 4:30 PM
9/9 Characteristics of Life	9/9 Introduction
9/16 Types of Cells & Organisms	9/16 Fractions and Decimals
9/23 Cell Structure & Function	9/23 Graphical Representations
9/30 Photosynthesis	9/30 Percentages
10/7 Respiration	10/7 Word Problems
10/14 Cell Division & Mitosis	10/14 Number Systems
10/21 The Cell Cycle	10/21 Expressions
10/28 Genetics & Mendel	10/28 Equations
11/4 Genetic Disorders & DNA	11/4 Solving Equations
11/11 Genes, DNA, and Proteins	11/11 Constant of Proportionality
11/18 Evolution & Darwin	11/18 Real-World Applications
11/25 Classifying Organisms	11/25 The Coordinate Graph

Grade 8

NGSS Physical Science Enrichment	Common Core Math Enrichment
Saturday 1:30 PM – 3:00 PM	Saturday 3:00 PM – 4:30 PM
9/9 Significant Figures	9/9 Rational/Irrational Numbers
9/16 Measurements & Units	9/16 Number Systems
9/23 Describing Motion	9/23 Proportionality
9/30 Forces & Changes in Motion	9/30 Exponents
10/7 Work & Energy	10/7 Linear Equations
10/14 Power & Momentum	10/14 Solving Linear Equations
10/21 Mechanical Advantage	10/21 Expressions of 2 Variables
10/28 Conservation of Energy	10/28 Introduction to Functions
11/4 Rotational/Circular Motion	11/4 Linear Functions
11/11 Planetary Motion	11/11 Modeling Real-World Data
11/18 Universal Gravitation	11/18 Equations on a Graph
11/25 Types of Waves	11/25 Slope