Science*Genius* Course Curriculum

Science*Genius* (SG) curriculum focuses on building a solid foundation in the Sciences for Elementary and Middle school children to keep them ahead at school and prepare for future AP Science courses in High School. Here is an outline of the curriculum for each level.

Science*Genius* Level I (SG1)

Discipline	**Topic**
Earth Sciences	Earth's Cycles, Research, Map Making
Earth Sciences	Earth's Structure & Position, Rocks & Minerals
Earth Sciences	Plate Tectonics, Volcanos, Earthquakes
Earth Sciences	Erosion & Weathering, Rivers & Water systems, Ground water
Earth Sciences	Glaciers, Wind & Waves, Atmosphere
Earth Sciences	Our Solar System, The Moon
Earth Sciences	Stars & their properties, Constellations, Kepler's Laws
Earth Sciences	Atmospheric Water, The World of Clouds, Atmospheric Pressure
Earth Sciences	Fossils, Earth's Past
Earth Sciences	The Ocean Floor, Ocean Currents
Earth Sciences	Topology, Astronomy
Physical Sciences	States of Matter
Physical Sciences	Chemistry of Matter
Physical Sciences	Force and Motion
Physical Sciences	Magnetism
Physical Sciences	Electricity
Physical Sciences	Sound Energy
Physical Sciences	Light Energy
Life Sciences	Intro to Living Things

Life Sciences	Cells
Life Sciences	Unicellular and Multicellular Organisms
Life Sciences	Ecology
Life Sciences	Population Ecology
Life Sciences	Genetics
Life Sciences	Evolution
Life Sciences	Classification
Life Sciences	Organs and Organ Systems

Science*Genius* Level II (SG2)

Discipline	**Topic**
Physical Sciences	The Inorganic World
Physical Sciences	Scientific Method & Models
Physical Sciences	Elements, Compounds, and Mixtures / Properties of Matter
Physical Sciences	KMT / States of Matter / Changes of State
Physical Sciences	Atoms
Physical Sciences	Periodic Table of Elements
Physical Sciences	Chemical Bonding
Physical Sciences	Chemical Reactions
Physical Sciences	Chemical Compounds
Physical Sciences	Energy
Physical Sciences	Thermal Energy and Heat
Physical Sciences	Electricity
Physical Sciences	Magnetism
Physical Sciences	Measurement and Forces

Physical Sciences	Gravity and Motion, Newton's Laws of Motion
Physical Sciences	Mechanical Waves and Sounds
Physical Sciences	Electromagnetic Spectrum and Light
Physical Sciences	Astronomy
Life Sciences	The Science of Biology
Life Sciences	The Organic World
Life Sciences	Chemistry of Life
Life Sciences	Enzymes
Life Sciences	Cellular Energetics
Life Sciences	Diving Deeper Into Proteins
Life Sciences	Cell Biology
Life Sciences	Cell Communication and Transport
Life Sciences	Glycolysis, Fermentation, and Cellular Respiration
Life Sciences	Photosynthesis (nature's smallest factory)
Life Sciences	Mitosis, Meiosis, and a look at Evolution
Life Sciences	Mendelian Genetics
Life Sciences	Molecular Genetics
Life Sciences	Gene Expression (More Genetics)
Life Sciences	Central Dogma
Life Sciences	Evolution, but Deeper
Life Sciences	The Genetic Basis of Evolution
Life Sciences	Ecology