



& The Charlotte Nature Museum

Science Club Curriculum for Third - Sixth Grade

One of the goals of the Discovery Place Science Club is to expose the participants to hands-on science, math and technology while nurturing their ability to express personal creativity and curiosity and developing problem-solving, questioning and communication skills. The participants will relate to the concepts presented because their relevance to daily life will be highlighted. We have discovered that the science club experience is greatly enhanced by integrating various disciplines (such as math, literature and art) into the learning process. Specifically, we have incorporated, where applicable as it pertains to scientific concepts, hands-on mathematics concepts and processes. These classes are designated below by the * symbol.

Science Club Year 2004-2005

Class 1	General - Science Skills	Classification, Processes, Lab Skills
Class 2	General - Science Skills	*Qualitative and Quantitative Measurements
Class 3	Biological and Health Science	Air and Pressure (Part 1)
Class 4	Physical and Space Science	Air and Pressure (Part 2)
Class 5	Physical and Space Science	Circuits and Communication
Class 6	Health Science	Eyes, Brain and Optical Illusions
Class 7	Physical Science - Physics	Buoyancy
Class 8	Physical Science - Physics	*Structures
Class 9	Physical Science - Chemistry	Colorful Chemistry (Acids and Bases)
Class 10	Physical Science - Chemistry	*Physical and Chemical Changes
Class 11	Space Science	Rockets Through Time (Part 1)
Class 12	Space Science	Rockets Through Time (Part 2)
Class 13	Biological Science	Food Webs and Food Chains
Class 14	Biological Science	Habitats and Earthworms

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Science Club Year 2005-2006

Class 1	General - Science Skills	*Scientific Method and Process
Class 2	Health Science	Anatomy--Teeth and Germs (Hygiene)
Class 3	Health Science	Skeletal System
Class 4	Space Science	Starry, Starry Night
Class 5	Space Science	What's Out There?--Solar System
Class 6	Physical Science - Physics	Solar Energy
Class 7	Physical Science - Physics	Soar with Aerodynamics
Class 8	Physical Science/Geometry	*Crystal Chemistry
Class 9	Physical Science - Chemistry	Chemistry of Dyes and Paints (Part 1)
Class 10	Physical Science - Chemistry	Chemistry of Dyes and Paints (Part 2)
Class 11	Biological Science	Amphibians
Class 12	Biological Science	Terrarium Habitats
Class 13	Biological Science	Insect Study
Class 14	Biological Science	Botany--Plants and Trees

Science Club Year 2006-2007

Class 1	Physical Science - Chemistry	Matter (with a focus on gases)
Class 2	Physical Science - Chemistry	Polymers
Class 3	General - Science Skills	*Sorting, Classification, Graphing
Class 4	Health Science	Cells and Genetics
Class 5	Health Science	Digestive System and Nutrition
Class 6	Physical Science - Chemistry and Physics	*Density (Part 1)
Class 7	Physical Science - Chemistry and Physics	*Density (Part 2)
Class 8	Physical Science - Chemistry	Chemistry Investigations - Kitchen Detective
Class 9	Physical Science - Physics	*Simple Machines and Their Uses
Class 10	Physical Science - Physics	Pneumatics and Hydraulics
Class 11	Space Science	Adventure in Space
Class 12	Earth/Environmental Science	Ecosystems (with a highlight of Tropical Rainforests)
Class 13	Biological Science	Oceans--Marine Animals
Class 14	Biological Science	Reptiles

Science Club Year 2007-2008

Class 1	General – Science Skills	Festive – Communication/Teamwork (Fundamental Skills)
Class 2	Biological Science	Living Things –Animal Adaptations
Class 3	Biological Science	Living Things – Plant Adaptations
Class 4	General – All Science Areas	*Using Math to do Science (Part 1)
Class 5	General – All Science Areas	*Using Math to do Science (Part 2)
Class 6	General – All Science Areas	*Using Math to do Science (Part 3)
Class 7	Earth/Environmental Science	Minerals
Class 8	Earth/Environmental Science	Rocks
Class 9	Physical Science – Physics	Physics Challenges (Part 1)
Class 10	Physical Science – Physics	Physics Challenges (Part 2)
Class 11	Physical Science – Chemistry	*Observation of Phase Changes
Class 12	Space Science	International Space Station (Part 1)
Class 13	Space Science	International Space Station (Part 2)
Class 14	Space Science	International Space Station (Part 3)