



& The Charlotte Nature Museum

Science Club Curriculum for Kindergarten - 2nd 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. We will also use literature to provide a more viable connection for our young scientist. This approach is designed to give the participants a poem or story to relate their science experience to. We will have a science circle where we will provide the literature connection and move to the tables to perform the experiments. The science poem or story will highlight the activities for that day.

Science Club Year 2004-2005

This year's curriculum includes a poem and science activity for each letter of the alphabet (classes 3 – 11). This approach has been tested and proves to be well received by participants.

Class 1	General - Science Skills	Classification, Processes, Lab Skills
Class 2	General - Science Skills	*Qualitative and Quantitative Measurements
Class 3	Various – Chemistry	*Activities for Alphabets A, B and C
Class 4	Various – Physics	*Activities for Alphabets D, E and F
Class 5	Various – Chemistry and Physics	*Activities for Alphabets G, H and I
Class 6	Various – Chemistry and Physics	Activities for Alphabets J, K and L
Class 7	Various – Physics, Biological and Earth/Environmental	Activities for Alphabets M, N and O
Class 8	Various – Physics and Biological	*Activities for Alphabets P, Q and R
Class 9	Various – Physics and Earth/Environmental	Activities for Alphabets S, T and U
Class 10	Various – Physics and Biological	Activities for Alphabets V, W and X
Class 11	Various – Chemistry, Physics, Biological and Earth/Environmental	Activities for Alphabets Y and Z and Review of Alphabet
Class 12	Physical Science - Chemistry	*Physical and Chemical Changes
Class 13	Physical Science - Physics	*Structures
Class 14	Biological Science	Habitats and Earthworms

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	Soar with Aerodynamics
Class 7	Physical Science - Physics	Flight
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	Plants
Class 12	Biological Science	Terrarium Habitats
Class 13	Biological Science	Food Webs and Food Chains
Class 14	Biological Science	Insect Study

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	Health Science	The Five Senses
Class 7	Physical Science - Chemistry and Physics	*Density
Class 8	Physical Science - Physics	Solar Energy
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	Biological Science	Amphibians
Class 13	Earth/Environmental Science	Ecosystems (with a highlight of Tropical Rainforests)
Class 14	Biological Science	Oceans--Marine Life

Science Club Year 2007-2008

Class 1	General – Science Skills	Festive – Communication/Teamwork (Fundamental Skills)
Class 2	Biological Science	Reptiles
Class 3	Biological Science	Living Things – Animal Adaptations
Class 4	Biological Science	Living Things – Plant Adaptations
Class 5	General – All Science Areas	*Using Math to do Science (Part 1)
Class 6	General – All Science Areas	*Using Math to do Science (Part 2)
Class 7	General – All Science Areas	*Using Math to do Science (Part 3)
Class 8	Biological Science	Spiders
Class 9	Physical Science – Physics	Magnetism
Class 10	Physical Science – Physics	Colorful Light
Class 11	Physical Science – Physics	All About Sound
Class 12	Physical Science – Chemistry	*Observation of Phase Changes
Class 13	Earth/Environmental Science	Weather or Not
Class 14	Physical Science – Physics	*Keep Your Balance (Mass)