

**Science Academy**  
**Homeschool Science Classes**  
**2011 – 2012**

**Sponsored by**  
**SCIENCE Resources**

**Course Descriptions**

**High-School Chemistry**

Grades 9-12

High-school chemistry is a college-preparatory, lab-based chemistry course suitable for any motivated high-school student. Students will be well prepared for the SAT II if they choose to take it, and an honors option (with science fair prep) will also be available.

**Day / Time:** Tuesdays, 9:30 a.m. to 12:00 p.m.

**Class Schedule:** Sept. 6 – Dec. 6 / Jan. 10 – May 22, with breaks for Thanksgiving, science fair, and Easter

**Class Location:** Springton Lake Presbyterian Church, Route 252 & Media Line Road, Newtown Square, PA

**Instructor:** Lisa Swieson

**Tuition:** \$500; includes all books and lab fees (does not include non-refundable registration fee)

**Textbooks:** *Chemistry: Matter and Change* and *Chemistry Lab Manual* (Glencoe/McGraw-Hill, ©2005)

**Prerequisite:** Documented completion of Algebra I

**Class Format:** Each class will consist of 45-60 minutes of review followed by a lab. Between classes, students are expected to read course material and complete lab write-ups and other daily assignments on their own. Take-home tests will be given monthly, and a lab practical will be given at the end of each semester.

**Topics Covered:**

Data Analysis	Chemical Reactions	Reaction Rates & Equilibrium
Matter & Atomic Structure	The Mole & Stoichiometry	Acids & Bases
Elements & Periodic Table	States of Matter	Redox Reactions
Ionic & Covalent Bonds	Solutions	Electrochemistry
	Energy & Chemical Changes	Nuclear Chemistry

**Other Requirements:** Students must have a scientific calculator (TI-84 Plus recommended if you need to buy one) and regular access to email.

**Middle-School Life Science**

Grades 6-8

This introductory life science course, designed to be a first significant study in the field of biology, is appropriate for any middle-school student who is able to read and work independently. Primary emphasis in this course will be on discovering the fun in lab science while learning basic concepts in biology. Students will also gain basic study skills as well as lab skills that will serve them well in higher-level science courses. Weekly labs will give students hands-on opportunities to investigate new principles and to apply concepts learned.

**Day / Time:** Thursdays, 9:30 to 11:00 a.m.

**Class Schedule:** Sept. 8 – Dec. 8 / Feb. 16 – May 24, with breaks for Thanksgiving and Easter

**Class Location:** Springton Lake Presbyterian Church, Route 252 & Media Line Road, Newtown Square, PA

**Instructor:** Lisa Swieson

**Tuition:** \$330; includes textbook and lab fees (does not include non-refundable registration fee)

**Textbook:** *Life Science* (Holt Science & Technology, ©2004)

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**Class Format:** Each class will consist of 30-45 minutes of review followed by a lab. Between classes, students are expected to read course material (approx. 14-20 pages weekly), complete homework assignments and lab write-ups, and prepare for labs on their own. Take-home tests will be given monthly, and a lab practical will be given at the end of each semester.

**Topics Covered:** Cells, heredity & DNA, evolution, survey of the six kingdoms (with emphasis on plants & animals), and human body systems.

## Instructor

**Lisa Swieson** received her BA in biology from the University of Pennsylvania in 1987. She has been homeschooling since 1995 and has been teaching music and science classes to homeschooled students since 1998. She is the founder and director of the Greater Philadelphia Homeschool Science Fair. Lisa also teaches science at Cornerstone High School.

Mrs. Swieson can be contacted during the week by phone or by email (preferred) for help with assignments.

## Registration / Payment Information

To register, complete the attached forms and submit them with a **non-refundable** \$40 registration fee. (Note that registration fee is a per-student fee **in addition to** the tuition.) Early registration fee is \$20 if received **by July 1**.

If the class you have chosen is full, you will have the option of putting your child on the waiting list. (Yes, we do sometimes get last-minute cancellations!)

One-half of tuition is due August 31. Tuition balance is due January 31.

Make check payable to "SCIENCE Resources" and send to:  
Lisa Swieson, 210 Lindbergh Avenue, Broomall, PA 19008

Tuition is not refundable after classes have started. Only wait-listed students who are never enrolled in a class can receive a refund of their registration fees.

This registration packet will be available online at [www.academy.science-resources.org](http://www.academy.science-resources.org) after June 10.

*Class sizes are limited, so register early!*

Financial aid is available.

## For More Information

Contact Lisa Swieson – 610.355.9174 – [LSwieson@science-resources.org](mailto:LSwieson@science-resources.org)  
or visit [www.science-resources.org](http://www.science-resources.org)