KOPERNIK OBSERVATORY & SCIENCE CENTER

698 UNDERWOOD ROAD, VESTAL, NEW YORK 13850
PHONE (607) 748-3685 * FAX (607) 748-3222 * WWW.KOPERNIK.ORG

Winter Pegasus 2015
Grades 1-12

The Pegasus programs for students in grades 1-12 encourage students to work and think like scientists as they explore the world around them. These workshops emphasize creativity, teamwork, and independent learning and teach students to draw on ***Science, Technology, Engineering and Math resources to solve problems in the real world.***

Glowtopia **Grades 1-2** Mon., Jan. 19 1-4 p.m. Member $30/Non-Member $36
During this program, students will experience various types of light: visible, ultra-violet and infrared. They will do experiments to gain a deeper understanding of light components, and learn how to detect and use different types of light. Students will travel to the mysterious planet Glowtopia, which emits a special purple light. They will design their own poster of this planet and experiment with glowing substances, floating bubbles, and glowing creatures. Students will build a glowing star-finder to navigate back to Earth.

Lunar Explorations **Grades 3-4** Fri., Jan. 23 6-9 p.m. Member $30/Non-Member $36
In this evening workshop, students will become lunar scientists and investigate the Moon's environment. Using KOSC's extensive collection of Moon maps and data, students will find a suitable spot for a Moon Colony, then find out how craters are made. If it is clear, they will observe a Crescent Moon through KOSC's telescopes.

Electricity & Magnetism **Grades 5-6** Mon., Feb. 16 1-4 p.m. Member $30/Non-Member $36
Students will safely produce artificial lightning packing more than 10,000 volts in KOSC's lab! They will learn how to create magnetism from electricity and reverse the process to get electricity from magnetism. They then will work as engineers, using electricity and magnetism as they build circuits for a space colony!

Extreme Magnification! **Grades 6-8** Sat., Mar. 7 10 a.m.-3 p.m. Member $46/Non-Member $54
Students will explore the smallest parts of our world using high magnification. This close-up approach allows the vivid details of natural and manufactured objects to stand out. Students will capture images of tiny objects, such as insects, hair, frost, and snowflakes (weather permitting) under extreme magnification. Students will use special software to process and manipulate these images with practical and artistic applications. Students also will create a composite of their macroscopic image superimposed on a microscopic world!

Observational Astronomy **Grades 8-12** Fri./Sat., Mar. 27/28 7-10 p.m. Member $51/Non-Member $60
This two-evening class will teach students about observing the night sky. The class will start with expert training on the use of binoculars, and Dobsonian and other basic telescopes. Students will quickly master these astronomical instruments and use them to find various nighttime objects. Operation of more sophisticated systems, such as our Celestron 14-Inch telescope, also will be covered. This class will be held on two nights to double the chances of clear skies!

Please check the session(s) you plan to attend: ❑ Glowtopia (1/19) ❑ Lunar Exploration (1/23)
❑ Electricity & Magnetism (2/16) ❑ Extreme Magnification (3/7) ❑ Observational Astronomy (3/27-28)

Student name: _____ Grade (2014/15) _____

Parent/Guardian/Grandparent name: _____

Address: _____ City/ST/ZIP _____

Phone: _____ Email: _____

Enclosed is: $_____ **(checks payable to "*Kopernik Observatory*")** KOSC Member ❑ Yes ❑ No ❑ (add $60 to join)

Credit Card # _____ ❑ Visa ❑ MasterCard ❑ Discover

Name on Credit Card _____ Expiration Date: _____ CVV code (3 digit code) _____

Registration form and fee must be received three days prior to class. Walk-in registrations available, space permitting, with additional $5 fee. Minimum enrollment 10 students required for each class to run. In case of cancellation, participants will be notified in advance and full refund returned. Refunds available (less $5 administration fee) if student withdraws seven days prior to the start of the class.

Return to: Winter Pegasus, KOSC, 698 Underwood Road, Vestal, NY 13850

Received____ DB____ QB_____