

### ***Science is Everywhere – It's Hands-On at Your Library!***

The Hamilton-Wenham Library has won an important grant from the federal Institute of Museum and Library Services through the Library Services and Technology Act administered by the Massachusetts Board of Library Commissioners.

The \$7,500 grant entitled ***Science is Everywhere – It's Hands-On at Your Library!*** will help the library offer Science-Technology-Engineering-Math (STEM) programs for children and teens who are in grades 3-8. Local teachers, Jeffrey Walsh and Bryan Sheckells, will be offering a wide variety of programs at the library including CAD workshops (utilizing the library's 3-D printer), bicycle mechanics, rockets, and electronics. The federal funds will also be used to purchase new science books and DVDs for the library's collection.

**Space is limited. Please register at the Reference Desk.**

#### **June**

##### **CAD 1 with Jeffrey Walsh**

For ages 11 to 15. Saturday, June 20, 10:30 to Noon

An introduction to the world of three-dimensional design using a free program called Tinkercad. Learn how to use Tinkercad and build your first 3-D object. Participants must bring their own laptop for this workshop. **Space is limited. Please register at the Reference Desk.**

##### **Catapults with Jeffrey Walsh**

For ages 11 to 15. Thursday, June 25, 3:30 to 5:30 PM

Create a mini, wooden catapult. The first half of the workshop will be spent crafting the catapult. In the second half you will be testing your catapult and improving your design. **Space is limited. Please register at the Reference Desk.**

##### **Bicycle Mechanics with Jeffrey Walsh**

For ages 11 to 19. Saturday, June 27, 10:30 to Noon

Discover simple tricks to keep your bicycle in tip top shape. You will learn how to fix a flat tire, & the best ways to avoid a flat tire in the first place. **Bring your bike to the workshop. Space is limited. Please register at the Reference Desk.**

## July

### Motion Photography with Toni Carolina

For ages 11 - 16. Thursday, July 9, 3:00-4:00 PM - A 2-part workshop. On July 9, bring a camera and a tripod, or 2 bags of beans, to steady the camera shot, and learn how to capture motion in your photographs. Then, come back three weeks later on **Wednesday, July 29 at 3:00 PM**, with prints of your captured motion shots and create an exhibit in the Young Adult area. **Space is limited. Please register at the Reference Desk.**

### Airplane Workshop with Jeffrey Walsh

For ages 11 - 15. Thursday, July 16, 3:00-5:00 PM - Build an elastic powered airplane from balsa wood and paper. How long you can keep your airplane in the air? Learn how adjusting different parts can change the way it flies, and find out what is actually happening when an airplane takes flight. **Space is limited. Please register at the Reference Desk.**

### Walk Along Glider Workshop with Phil Rossoni

Thursday, July 23, 2 sessions: for ages 9 - 11, 2:00-3:00 PM and for ages 12 - 15, 3:30-4:30 PM - Build and pilot a tumblewing paper airplane. There will be duration competitions to hone your flying skills. Experiment with wing loading and how an airplane is trimmed for optimum gliding. You will have opportunities to fly gliders of varying size and weight. **Space is limited. Please register at the Reference Desk.**

### Metamorphosis: Pastel Painting with Gregory Maichack

For ages 11 to adult. Thursday, July 23, 6 - 8 PM - Metamorphosize! Become an artist in this hands-on pastel painting workshop. Greg will incorporate fabulous reference photos of insects from his trip to Montreal's Insectarium. Professional grade pastels, paper, and materials are included. **Space is limited. Please register at the Reference Desk.**

### Rockets Workshop with Jeffrey Walsh

For ages 11 to 15. Thursday, July 30, 2:30-5:00 PM - Create your very own chrome rocket that can soar up to 800 feet in the air. Once the rockets have been built, you will take them outside to the field and prepare for takeoff. **Space is limited. Please register at the Reference Desk.**

## August

### Boston Museum of Science STARLAB: One Sky, Many Stories –

Thursday, August 13, Three sessions beginning at 2:30 p.m., open to kids ages 5 to 15. People around the world have interpreted the night sky for centuries, creating a rich collection of constellations and star stories. Within a portable planetarium, participants will tour the solar system and beyond while learning useful tips to navigate the evening sky and hearing different cultural explanations for the cosmos. **Please register for this program in the Children's Room, beginning June 29.**

### North Shore Amateur Astronomy Club Star Party

Best for ages 10 to adult. Thursday, August 20, 7:30 PM to 9:00 PM

A short astronomy program inside, followed by observation of the night sky through club telescopes on the field behind the library. If there is rain or heavy cloud cover, the back-up date is Tuesday, August 25. **Space is limited. Please register at the Reference Desk.**