**NOVA Labs** is a free digital platform that engages teens and lifelong learners in activities and games that foster authentic scientific exploration.

Visit [pbs.org/nova/labs](http://pbs.org/nova/labs) for games, videos that illustrate key concepts, standards-based educator guides, and profiles of scientists in each field.

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**SUN LAB**

The Sun Lab uses NASA’s solar telescope feeds to help students understand and predict solar weather that can affect us on Earth.

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**ENERGY LAB**

The Energy Lab challenges students to design renewable energy systems for major cities based on realistic data models.

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**CLOUD LAB**

The Cloud Lab leverages NASA’s Earth satellites to help students understand clouds and their role in weather and climate.

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**RNA LAB**

The RNA Lab introduces students to a game called Eterna, in which they can design RNA molecules that might help scientists develop therapies to fight cancer and other diseases.

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**CYBERSECURITY LAB**

The Cybersecurity Lab teaches students how to keep their digital lives safe, spot phishing scams, understand the basics of coding, and defend against cyber attacks.
MIT BLOSSOMS has developed - over 6 years - a free, online repository of 100+ math, science and engineering video lessons for high school classes.

Every BLOSSOMS lesson is a complete lesson resource with teacher guide, downloadable class handouts, and set of additional relevant online resources.

Each 50-minute lesson is designed with the unique BLOSSOMS “teaching duet” pedagogy where the video teacher presents the material in short, 2- to 4-minute segments allowing time between these segments for the classroom teacher to lead students in an active and challenging break assignment.

The goals of MIT BLOSSOMS include:

- Exciting students about STEM subjects
- Developing students’ critical-thinking and problem-solving skills
- Connecting math and science to the real world
- Involving students in how scientists, mathematicians and engineers think
- Encouraging universities to help strengthen high school STEM education
- Encouraging high school teachers to adopt a more active, student-centered style of teaching
- Fostering cross-cultural awareness and sensitivity.

BLOSSOMS lesson creators: university professors and students, high school teachers, scientists and STEM professionals.

MIT BLOSSOMS trains high school teachers in both the utilization and creation of BLOSSOMS lessons, encouraging them to work together in “lesson study” in the design of their lessons.

MIT BLOSSOMS works with high school teachers in the United States and also in several other countries around the world.
Mass Audubon’s Digital Environmental Education Project is based at Drumlin Farm Wildlife Sanctuary in Lincoln MA. Customized programming is available on site or at local schools and green spaces.

For more information or to schedule a program, please contact Renata Pomponi, Program Innovation Coordinator: rpomponi@massaudubon.org or 781-259-2248