

HIVE LAB

bringing learning outside the classroom

Hive Lab was created to inspire learning outside the classroom in formats that spark critical thinking and self-motivation. Each month the library will offer a hands-on, self-directed activity aligned with Indian Trail's science curriculum and the Next Generation Science Standards (NGSS).

To receive credit in the classroom, students will show active participation in the "Credit Challenge." This activity is designed to directly reinforce concepts covered in the classroom.

Unlike the classroom, these activities are meant to be self-directed, completed by the student with little help from an instructor. The idea is for students to explore, tinker, and problem solve on their own.

When the experiment, activity, or project is completed, students should present their work to a teen librarian. The librarian will log their name and project for their teacher.

Other activities will also be available that encourage critical thinking and problem solving. Students are welcome to participate in as many of these as they like. Librarians will log every activity a student participates in. Please talk to your teacher about receiving credit.

The Lab, held in the Teen Program Room on the second floor of the library, is open after school until 5pm during the school week. Projects take at least 30 minutes, so students should arrive with plenty of time.

The library will provide all the materials needed to complete a project.

Fly, Float, Ride - October 17-21

Mass, Volume, and Density – 6th Grade Unit 1

Credit Challenge: Float Your Boat - Using only the materials provided, design and build boat that holds as much weight as possible without sinking. Test your design in both fresh and salt water.

Additional challenges include building a rubber band car and paper airplane design.

It's Electric - November 14-18

Energy Transfer – 7th Grade Unit 1

Credit Challenge: Light Up Your Greeting - Students will use copper tape and LED lights to create their own energy transfer. The end product will be a greeting card that demonstrates a basic circuit with at least one LED light.

Additional challenges include using electronic maker kits like Little Bits, Snap Circuits, and an Electronic Playground.

Roller Coaster Madness - December 5-9

Motion & Forces – 8th Grade Unit 1

Credit Challenge: Mini Roller Coaster – Using only the materials provided build a path that moves a ball through 2 turns, a downhill slope, and ends with an uphill slope.

The additional challenge will be to participate in creating a collaborative, large-scale roller coaster.

Questions? Contact [Elizabeth Lynch](#), Teen Services Coordinator, Addison Public Library, 630.458.3317