



Science, Technology, Engineering, and Math activities to keep kids engaged in more ways.



5110 Jamesville Road DeWitt, NY 13078 315-446-3578 www.CLDandJ.org

the DTG iPads and DTG Kits



Discovery To Go Collection

Discovery to Go (DTG) is a new kid-friendly collection of **science**, **technology**, **engineering**, and **math** (STEM) books, DVDs, equipment, and kits for use at home or in the classroom to support active and engaged learning. The Community Library received a special New York State Legislative grant through former Assemblyman Sam Roberts' office to purchase the collection.



Wolfe Introductory Stereomicroscope



Snap Circuits: Sound



Heart kit



Shapes kit



Atomic model set



Exploring Wind and Water Energy K'NEX set

The **Discovery To Go Catalog**, available at the Library and on the Library's website, has more detailed information about all the kits in the collection, and contains information about policies to borrow. Visit the Library's **online catalog: catalog.onlib.org** to find books and DVDs in the DTG collection.

If you have any questions about the collection, please contact Emily Wormuth at ewormuth@onlib.org.

App Collections on DTG iPads

More than 50 apps were purchased with DTG grant funds. The apps were selected by library staff to help support STEM learning and other skills, such as digital literacy, and problem-solving.









These apps are available on the DTG iPads (2) which circulate from the information desk. The entire list of DTG apps is also available at the information desk. The app list includes recommended age ranges for users of the apps as well as a brief description of each app.

The apps have content covering thirteen major topics:

ANIMALS
ASTRONOMY
CHEMISTRY
COMPUTER ART
EARTH SCIENCE
ELECTRICITY
ENGINEERING

HISTORY HUMAN BODY MATHEMATICS PHYSICS PROGRAMMING READING

Many of the apps demonstrate concepts that can also be explored with the DTG kits. In this guide, you will find recommendations for kits and apps that go well together.

Scratch is also included as an app on page 7, however this free program is available on the DTG Laptops only.

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Science & Technology

EARTH SCIENCE





WATER CYCLE HD

WEATHER CENTER

Forecasting weather is one form of telling the future. This app and kit demonstrates the principles of forecasting and the water cycle in a hand-on way which make invisible characteristics like pressure and humidity understandable to kids.

EARTH SCIENCE, ANIMALS





ULTIMATE DINOPEDIA

ADVANCED FOSSIL **COLLECTION**

We all love dinosaurs. They are exciting, mysterious, and tell us so much about the Earth and evolution. The advanced fossil kit helps kids explore even more as the time of the dinosaurs, and even older eras, are revealed.

Science & Technology

EARTH SCIENCE & RENEWABLE ENERGY







AL GORE — OUR CHOICE

K'NEX: EXPLORING **SOLAR ENERGY**

In this app, Al Gore investigates the causes of global warming and presents solutions that could prevent this disaster from getting worse. The K'NEX set shows the power of renewable solar energy with 3 building ideas.

HUMAN BODY







AMAZING DIGESTIVE JOURNEY

MINI TORSO

Trace the path of the food you eat from the inside and the outside with the Amazing Digestive Journey app, Peek into the workings of your digestive system. Then, relive the best parts of the trip with the Mini Torso.

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Science & Technology

ASTRONOMY





POCKET UNIVERSE CELESTRON FIRSTSCOPE

The delights of the universe are available to experience on Earth with this simple app that displays the stars and constellations. Perfect with the beginner's FirstScope for fascinating forays into astronomy.

CHEMISTRY









ATOMIC MODEL SET

Elements may be fundamental but it is molecules that do the real work in our world. Discover how elements combine in different ways to make everything we know. Make your own molecules and feel the power.

Technology & Problem-Solving

PROGRAMMING AND LOGIC





OZOBOT APP

OZOBOTS

Control color-sensing Ozobot mini robots with this app. Ozobots can follow drawn lines and read specific color sequences for navigation and special moves. Get rolling, dancing, and racing with the Ozobot starter kits and the Ozobot app!

PROGRAMMING AND LOGIC





LIGHTBOT

SNAP CUBES

Lightbot teaches basic programming simply by guiding a robot to light up tiles and solve levels using commands. Use the snap cubes as a way to visualize what needs to happen to complete the puzzle in the game.

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Engineering & Technology

ELECTRICITY





EXPLORIMENTS: SIMPLE CIRCUITS

SNAP CIRCUITS: LIGHT, SOUND, & PRO

The app provides a complete toolkit for understanding and designing series, parallel, and combination circuits. The Snap Circuits kits let kids build circuits with small pieces that do work like make a sound or flash a light.

ELECTRICITY





EXPLORIMENTS: CURRENT AND CHARGE

MAKEY MAKEY

Makey Makey lets kids turn almost anything into an electrical device to produce sound, or control a game. Making a banana piano is a breeze! The app shows how current and charge work and how they are measured.

Engineering & Technology

PHYSICS AND PROGRAMMING





SPHERO EDU

SPHERO SPRK+

Control the Sphero SPRK+ drivable robot with the Sphero Edu coding app. Sphero Edu is great for beginners, intermediate and advanced users. Code with blocks or give robots commands by drawing a path in the app for the robot to follow.

PHYSICS AND SIMPLE MACHINES





SIMPLEPHYSICS

K'NEX: EXPLORING WIND & WATER ENERGY

SimplePhysics simulates designs with a physics engine. Build structures like ferris wheels or tree houses. The K'NEX kit encourages building and this kit powers the structures with renewable wind and water sources.

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Math & Technology

ADD, SUBTRACT, MULTIPLY, DIVIDE







CONNECTING CUISENAIRE RODS SET

Defeat Dr. Odd in locations across the world and learn the basic mathematical operations. For a more immersive experience, use the connecting cuisenaire rods to help visualize the operations being learned.

MATH CHALLENGES MADE EASIER





MATHALICIOUS

ABACUS

Mathalicious gives you simple math problems to solve, but the questions are timed. Use the abacus to find the answers. A great way to learn how to use this tool that has stood the test of time. Are you ready for a challenge?

Math & Technology

SOLVING EQUATIONS AND SCALES





DRAGONBOX ALGEBRA 5+

BABY BEAR BALANCE SET

Dragonbox Algebra 5+ teaches kids how to solve linear equations in a very simple, stimulating way. Players don't even know they are doing math. The bear balance set can be used to help visualize the balancing process.

MEASUREMENT AND DATA





EXPLORIMENTS: WEIGHT, MASS,

TRIPLE BEAM BALANCE

& GRAVITY

Use the triple beam balance to understand how gravity affects objects on Earth, then use the Exploriments app to explore further. See how gravity works on different planets or even below the Earth's surface!

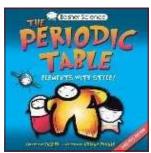
Other Items in the DTG Collection

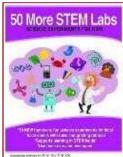
Cool Science and Math Stuff to Check Out

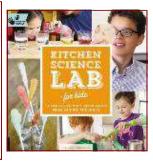
The DTG collection and the Library's children's non-fiction collection contain

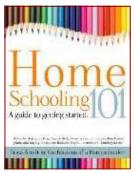
over 200 books and DVDs to help parents and kids learn better. There are many STEM titles and homeschooling resources for K-12th grade learners.

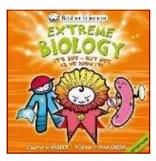
Here is a small sample of the items in our collection that would be a great supplement for STEM activities:

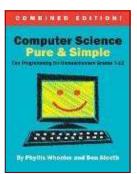












Ask about our

 $homeschooling\ programs!$