**Discovery to Go (DTG)** is a kid-friendly collection of science, technology, engineering, and math (STEM) items that patrons can either use in the library or checkout with an adult library card. DeWitt Community Library received a special New York State Legislative grant through former Assemblyman Sam Roberts’ office to purchase the collection.

The **Discovery to Go (DTG)** collection of materials was selected to foster children’s interests in science, technology, engineering, and math (STEM) subjects in school and facilitate greater understanding. The DTG collection includes a wide variety of items that can be checked out for use at home or in the classroom to support active and engaged learning including electronic devices, equipment, and manipulatives.

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

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2018 Edition
Wolfe® Introductory Stereomicroscope
Observe the world around you up close with a stereomicroscope. You can examine whole specimens and maneuver them easily on the surface to focus on the unique patterns and textures of an item, for example a flower. All the advantages of a true stereomicroscope including a clear, 3-D, 20x image, slide-in 2x objective, long, 80-mm working distance; large, 10mm field of view, and a dependable rack-and-pinion focus with slip clutch and tension control.

My First Lab™ Duo-Scope
This 2-in-1 microscope is an excellent beginner microscope for younger students. Two LED light sources allow for viewing both slides and solid objects, including coins, plants, stamps, insects, jewelry, and more. Cordless battery power makes it portable for field study. The microscope has a 10x eyepiece and allows for 40x, 100x, and 400x magnification. Accessories include 5 blank slides, 1 concavity (well) slide, and 4 prepared slides; 2 bottles of stain; forceps and scalpel; plastic test tube; and petri dish.

Includes Basic Science Microscope Slide Set
The slide set includes six slides selected to introduce students to microscopy. Includes letter “e”, cork, salt crystals, dust, volcanic ash, and insect. With study guide.

Celestron Firstscope 76mm Reflector Telescope
The Cosmos FirstScope is a high quality reflector tabletop telescope with a 76mm reflector optical tube. It is an ideal telescope for beginning users. The user simply navigates the night sky by moving the tube in the direction of the desired object and focusing.
GEOLOGY

Rocks and Minerals
This collection includes the *DK Rocks and Minerals* guide and 40 specimens. Study categories are under the following headings: rock-forming minerals; ore-forming minerals; industrial minerals; and sedimentary, igneous, and metamorphic rocks.

Advanced Fossil Collection
The kit consists of *DK Smithsonian Eyewitness Fossil* handbook and 30 fossils representing animal phyla and plants from the Cambrian to the Cretaceous Periods in a compartmented container.

BIOLOGY

Heart
Highly detailed 2-part heart just slightly smaller than life-size with exquisite detail throughout. The front heart wall is detachable to reveal the chambers and valves inside. The kit also includes the *DK Eyewitness Human Body*.

Mini Torso
This 12-part human mini torso is approximately half life-size. Even small hands can quickly disassemble and assemble this small but detailed torso. Supplied with Torso Guide. Includes the following removable parts and organs: 2-head halves, brain, 2 lungs, 2-part heart, stomach, liver with gall bladder and 2-part intestinal tract.
Young Scientists Toolkit!

Atomic Model Set
This set includes 370 atom centers and 150 bonds suitable for constructing complex organic and inorganic molecules. *Basher Science, The Complete Periodic Table* is also included in the kit.

Bushnell Binoculars
Wide-angle, Perma Focus binoculars with 7x magnification and 50-millimeter objective lenses. Fixed-focus operation dials in focus at any distance automatically. Fully coated optics for improved clarity and light transmission. Ergonomic rubber housing for a secure grip and shock resistance. Designed for sporting events and nature observation.

Weather Center
Set up a weather center in your home or classroom. This set of 3 instruments — thermometer, barometer, and hygrometer — helps students collect daily weather information, chart conditions, and make predictions. The set includes a carrying case, stand for each device, and complete teacher’s guide with activities. The kit also contains *The Everything Kids Weather Book*.

Google Cardboard
Knox NEXT VR Viewer is a virtual reality device! Simply download the Google Cardboard app from your app store, and insert your smart phone. In an afternoon, you can explore exhibits in the Smithsonian, ride a roller coaster, and see the Eiffel Tower! The app works by creating a split screen of a panoramic image to immerse you in the scene.
12 Hour Learning Clock
Accurate to the minute and featuring an AM/PM digital display window, this interactive clock teaches both analog and digital time. Geared clock’s digital display window keeps track to the minute with the clock hands, helping children learn both methods of time keeping.

Baby Bear Balance Set
Clear balance buckets remove easily for emptying and allow students to see what they have placed inside them. Cover buckets with lids for use as measurement platforms. Buckets can also be used to measure liquids! Balance features a built-in storage drawer and measures 16.5" x 6.5" x 6". Set includes balance plus 102 bears in six rainbow colors (17 of each color). Each Baby Bear™ measures 1” and weighs 4 grams.

Carolina Triple Beam Balance [Scale]
This versatile triple beam balance not only demonstrates mass measurement concepts, it serves as an accurate, reliable instrument for everyday weighing. Accurately weighs solids, liquids, and powders.

Classroom Compact Scale
A small scale that does big jobs, this compact, heavy duty scale is perfect for small classrooms and science labs with little counter space. The large, clear digital readout and TARE button make it easy for younger and older learners alike to use this vital tool. Comes with 2 AA batteries, and a MODE button for easy conversion between grams, pounds and ounces. Capacity 5000 g/176.4 oz, Accuracy 1.0 g/0.05 oz, Weighting Modes grams/pounds/oz, Platform Size 5" diameter.
Tech for Budding Engineers!

Exploring Wind & Water Energy

Explore 2 major sources of renewable energy—wind and water—and learn valuable engineering skills. Focus on wind power, hydro power, hydroelectric energy generation, and efficiency. Builds 6 models, 2 at a time. Supports 2 to 3 students per team. Includes building instructions and teacher’s guide. In the hydro lessons, the strong storage tub with snap-on lid is used extensively as a water container. Pitchers, funnels, and bottles to hold, distribute, and measure water are needed but not supplied.

Investigating Solar Energy

Go green and bring STEM concepts to life with K'NEX®. Learn how to convert the energy of the sun into electricity to power K’NEX® models. Builds 3 models, 1 at a time. Supports 2 to 3 students working as a team. Sunlight or a standard incandescent 60-W light source (not included) is needed. Contains 128 K’NEX® parts (including 1 solar panel and 2 motors), building instructions, and teacher’s guide.

E-Blox Circuit Builder 120

This modular circuit building kit is great for young electrical engineers and kids interested in the magic of currents, electricity, and voltage. This kit comes with a set of 46 self-contained parts which stack together like legos as well as special blocks for light, sound and spinning. Discover how lights, alarms, motors, switches and more work all while building fun projects. Different colored blocks are coded for different uses and easy identification. Comes with an instruction guide to build 120 different projects.

littleBits Electronics Space Kit

Have you ever wondered how scientists learn so much about space and the world around them? This kit provides hands-on learning about electromagnetic, kinetic, and potential energy. It includes an instruction guide with 5 NASA lesson plans and 10 STEAM activities to get you learning about inputs and outputs as well as circuits and troubleshooting. Easy to snap together modular pieces allow for easy-of-use, clear diagrams of how projects are assembled and their relation to astronomy is the core of this exciting kit.
Snap Circuits Sound
Make cool sound effects, play back recorded voice at different speeds, or connect a smartphone to analyze sounds with apps. Introduce students to sound and sound wave properties with this fun, engaging set. All parts are mounted on plastic modules and snap together with ease. No tools required—just follow the colorful pictures in the manual to build over 185 exciting projects.

Snap Circuits Pro
Make learning electronics easy and fun! This set of building blocks with snaps enables young experimenters to build different electrical and electronic circuits. Set includes more than 75 parts—switch blocks, lamp blocks, battery blocks, and different length wire blocks, to mention a few, in different colors and numbered for easy identification. Also includes instructions for 500 projects.

Snap Circuits Light
Watch and be amazed at what your music can do with the new Snap Circuits® light—it makes learning about light and its properties easy and fun. Connect any MP3 player to enjoy your music and a light show. Explore and experiment with color-changing LEDs, strobe lights, and fiber optics. All parts are mounted on plastic modules and snap together with ease. No tools required. Just follow the colorful pictures in the manual to build over 175 exciting projects.
Tech for Budding Engineers!

Cubelets 6
One of the simplest robot-building kits available, this pack features cubes that snap together with magnets and send signals to each other. The kit has 2 input blocks: a brightness sensor and a distance sensor, and 2 output blocks: a flashlight block and a drive block. Putting these blocks together and exposing the build to different conditions changes the intensity of the outputs. The modular magnetic design makes changing the configuration, or fixing the design of the robot a snap!

Ozobot Starter Kit
The Starter Pack includes all the necessary tools to ignite the imaginations of children, inspiring and enticing them to play with Ozobot, and in turn - teaching the child bold basics of coding. Whatever your child can imagine, the tiny robot can do. Learning how to control Ozobot is easy, through color codes with just regular paper and four primary color markers. Then your child can advance with exciting DIY and STEM activities that are as limitless as your child’s own creativity.

Sphero SPRK+
Designed to inspire curiosity, creativity, and invention through connected play and coding, SPRK+ is far more than just a robot. Powered by the Sphero Edu app (available for download in the App Store, Google Play, Chrome Store and Kindle Store), you can easily learn programming with hands-on activities. From draw and drive commands to block-based or even JavaScript text programming, Sphero Edu focuses on learner progression. This kit includes a quick-start guide which is designed to get new users rolling quickly. SPRK+ will foster a love of robotics, coding, and STEAM.

Makey Makey
MaKey MaKey is an invention kit for the 21st century. Turn everyday objects into touchpads and combine them with a computer and the internet. It’s a simple and fun Invention Kit for Beginners and Experts doing art, engineering, and everything in between. Anything that conducts electricity can be a controller: playdough, bananas, even you! For more information and resources, visit: makeymakey.com/howto.php

Arduino Starter Kit
Arduino is a micro-computer, a small computer which allows for many different activities, including learning about code, programming, and electronics! The Starter Kit is a great way to get started with Arduino. The Starter Kit includes the components you need to make 15 fun projects following the step-by-step tutorials on the Project Book. Starting the basics of electronics, to more complex projects, the kit will help you control the physical world with sensor and actuators. This kit needs a computer to use as well as the free Arduino, Python, and Processing software.

Code-a-Pillar
Code-a-pillar inspires little learners to be big thinkers by encouraging preschoolers to arrange (and rearrange) the easy-to-connect segments in endless combinations, sending Code-a-pillar on his path.
Snap Cubes
Great for counting, sorting, measurement and graphing. This set of 500 plastic cubes in 10 colors connect on all six sides. Easy for little hands to connect and twist apart. Includes a teacher guide.

Abacus
Abacus activities offer students tactile counting practice and visual reinforcement of math facts. This abacus features a frame that is thicker than the beads, which allows abacus to lie flat on student desks. Includes 10 rows of 10 beads in 2 colors grouped in fives for ease of use. Abacus measures 8 1/2” L x 9 1/2” W x 1/2” H. Kit also includes the text Help Me Learn Addition by Marzollo.

Two-Color Counters
This set of 200 red and yellow plastic counters is terrific for modeling math concepts and introducing probability.

Rainbow Fraction Tiles Activity Set
Rainbow Fraction tiles makes understanding fractions easier. With these color-coded tiles, students manipulate parts of a whole to see how they relate to each other. Visualize fractional concepts with this set of 51 proportional plastic pieces. Color-coding helps students apply their understanding of concepts to new contexts. Students will begin to make mathematical connections with they see that red always equals 1, yellow equals ¼ and so on. Includes: Rainbow Fraction® tiles - represents 1 whole, 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10 and 1/12, plastic tray, and teacher’s guide.
Base Ten Starter Set
This unique set of base ten components conveniently interlocks to clarify place value, estimation and operations concepts by enabling students to manipulate and visualize varying quantities with ease. More advanced students can explore spatial relationships and volume. Included with the Base Ten Kit is the book *Base Ten Grades 3-6* by O'Connor.

Place Value Bingo
Helps to sharpen skills in the areas of place value from ones to millions, number recognition with relation to place value concepts, odd and even numbers, and concepts of "more than" or "less than." Includes Teacher's Quick Reference Chart. Up to 36 players. Aligns with Common Core State Standards. Includes: 36 Numbered bingo boards which focus on place value from ones through million. 72 Calling cards with the answer to each number clue provided. 968 Bingo markers. Includes easy-to-manipulate place value disks which allow students to visually track what happens when they regroup numbers in both addition and subtraction. And they help illustrate that multiplication is the same as repeated addition and division is the same as repeated subtraction. A re-sealable poly bag plus instruction sheet included.

Connecting Cuisenaire Rods Small Group Set
Help students make connections in math with these colorful, engaging manipulatives. Plastic rods snap together to clarify addition, subtraction, multiplication, division, fractions, decimals, geometry, measurement, patterns, algebra and probability concepts in a visual and tactile way. Connecting feature makes manipulation and demonstration easier. Rods are marked in 1-cm increments on one side. Small Group Set contains 155 durable rods for use with 4–6 students, Activity Guide and convenient storage tray. The Cuisenaire Rods Kit also includes *Flip Over Math Activity Book: story problems.*
Double-Sided Rainbow Geoboards
Color and geometry intersect with these double-sided rainbow geoboards. Two different pin arrangements allow students to create an endless variety of shapes using rubber bands in bright hues. Set of 6.

Three Bear Family Sorting and Patterns Kit
Develop early math skills with a variety of colorful bear manipulatives. Includes 96 Three Bear Family counters in six rainbow colors, six sorting bowls, 2” color cube, number cue, 16 pattern cards, 12 double-sides activity cards and bear game spinner. Packaged in plastic storage tub.

Pattern Blocks Activity Set
Encourage geometric exploration! Pattern blocks are made in plastic in six bright colors and six shapes, and each side is calibrated so all the pieces fit together. Young learners can explore geometry and measurement concepts such as shapes, area, and symmetry. Also can be used for patterning, sorting, classifying and attribute recognition. The set also includes a teachers guide and activity cards.

Pattern Blocks
Set of 250 colorful 1 cm hardwood blocks in storage bucket. Contains 25 yellow hexagons, 25 orange squares, 50 green triangles, 50 red trapezoids, 50 blue parallelograms, 50 tan rhombuses and Teaching Guide. Also included in the kit is the text *Flip over Math Addition and Subtraction.*
Shapes Kit
Made of durable, flexible plastic, each GeoModel® Folding Net folds into a different 3D shape. Demonstrate shape properties and relationships, and enhance spatial reasoning skills in measurement, volume, and surface area. Each set includes a teacher’s activity book, 4 write-on/wipe-off activity cards, 11 transparent plastic solids and 11 nets (cone, cube, cylinder, hexagonal prism, hexagonal pyramid, pentagonal prism, pentagonal pyramid, rectangular prism, square pyramid, triangular prism, triangular pyramid).

Includes Folding Geometric Shapes Cards
This selection of ready-to-go activities targets geometry and measurement topics, including describing and comparing shapes, symmetry, surface area, area, Euler’s formula and more. Provides differentiated instruction through 38 different hands-on activities, each clearly labeled with primary focus skills. Supports individual students as well as small groups and centers. Double-sided write & wipe cards measure 10”L x 7”H. Includes storage box and answer card. The kit also includes the book Shapes in Math, Science and Nature.

Classpack Tangrams
Invented in China, the tangram is a 7-piece square puzzle that has challenged learners of all ages for over one thousand years. What do you get when you cross this classic puzzle with a strikingly fresh color palette? Simply, Brights!: teaching tools you can trust, in colors they’ll embrace. Tangrams Classpack includes 210 shaped pieces—enough to make 30 tangrams—including small, medium, and large triangles, squares, and parallelograms, all in 6 vibrant colors. Perfect for engaging the entire class in learning play involving shape identification, comparison and composition, symmetry, and more. Included in the kit is the book Tangrams: 330 Puzzles.
Apple iPad Air 2
On our iPads we have a wide variety of educational apps for students in the STEM (science, technology, engineering, and math) content areas. The apps are designed to help kids learn in a fun and hands-on way. Whether they are examining a human brain or combating an evil mastermind by solving equations they will gain skills that will last into the future!

Just a few of the over 50 apps we have preloaded!

BRIAN COX’S WONDERS OF LIFE: HarperCollins Publishers Ltd. Age Level: 4+
From the vast networks of subterranean freshwater caverns of the Yucatan peninsula to the Great White Sharks haunting the South Neptune Islands, from the Hermit Crabs of Christmas Island to the Red Kangaroo of Western Australia, this app will help you uncover the secrets of life in the most unexpected locations and in the most stunning detail.

3D BRAIN: Cold Spring Harbor Laboratory Age Level: 12+ for Infrequent/Mild Medical/Treatment Information
Use your touch screen to rotate and zoom around 29 interactive structures. Discover how each brain region functions, what happens when it is injured, and how it is involved in mental illness. Each detailed structure comes with information on functions, disorders, brain damage, case studies, and links to modern research.

LIGHTBOT - PROGRAMMING PUZZLES: Lightbot Inc. Age Level: 4+
Lightbot is a programming puzzle game—a game whose game mechanics require using programming logic to solve levels. Simply guiding a robot to light up tiles and solve levels using commands, Lightbot cultivates a real understanding of procedures, loops, and conditionals for players.

OPERATION MATH: Spinlight Studio Age Level: 4+
Defeat Dr. Odd and earn the latest spy gear in the award-winning game that transforms math drills into a global learning adventure. From the streets of Paris to the pyramids of Egypt, Operation Math includes more than 100 timed missions that help players learn addition, subtraction, multiplication and division.

MONSTER PHYSICS: Freecloud Design, Inc. Age Level: 4+
Monster Physics is a unique building app that lets you play with physics! Build and operate your own car, crane, rocket ship, plane, helicopter, tank and more!

If you are interested in learning more about our Discovery To Go iPads, please see our DTG App Catalog for a complete list of all the incredible educational apps we have available in the STEM subject areas.
WeKnow

HP Pavilion 17" TouchSmart Laptops
The HP Pavilion Laptops with touchscreen capability allow users of all ages easy and intuitive access to the software installed and to view or play educational programs and games online. Our WeKnow Laptops are loaded with software to enhance children's knowledge, whether they are doing school work or learning on their own.

LEGO Education WeDo Construction Set. 9580
Note: For Use with the WeKnow Laptop.
The LEGO® Education WeDo Construction Set is an easy-to-use set that introduces young students to robotics when combined with the LEGO Education WeDo Software v.1.2 and Activity Pack. Students will be able to build LEGO models featuring working motors and sensors; program their models; and explore a series of cross-curricular, theme-based activities while developing their skills in science, technology, engineering, and mathematics as well as language, literacy, and social studies. The Construction Set comes with more than 150 elements including a motor, tilt sensor, motion sensor, and LEGO USB Hub.

LEGO Education WeDo 9585
Note: Works in conjunction with the Construction Set and the WeKnow Laptop.
The new LEGO® Education WeDo Resource Set is designed to serve as additional parts for the WeDo Robotics Construction Set and includes 325 different elements that combine with the Construction Set to build four new, larger models – a tower crane, an intelligent house, a Ferris wheel, and a car. The set takes STEM concept learning with WeDo to the next level, extending the possibilities for creative problem-solving challenges, literacy lessons, and math connections for elementary students.
Microsoft Office Suite
Microsoft Office is installed on our WeKnow laptops and it includes Word, Excel, PowerPoint, and OneNote. Use these programs to write homework assignments, make tables and spreadsheets, create presentations, and take detailed notes for your classes.

Adobe Reader or Adobe Acrobat
On each of the WeKnow laptops we have installed Adobe software. The Adobe Reader software allows you to read pdfs while the Acrobat gives you the additional tools to utilize with pdf documents.

Algodo is a fun and robust 2D simulation software which allows people to create and assemble machines and adjust physics properties for different effects. Explore physics, build amazing inventions, design cool games or experiment with Algodo.

Geogebra is a math visualization program. Students love it because it makes math tangible. Geogebra makes a link between geometry and algebra in an entirely new, visual way - kids can finally see, touch, and experience math!

123D Design is a computer-aided design program that allows kids to model their ideas in 3-dimensional, digital space. It is free and simpler than most professional 3D modelling software, perfect for beginner!

Tinkercad is a very simple computer-aided design program for those of us just starting out in the modelling and design space. Put together simple shapes to make useful objects and tools in the digital world.

Redstone Circuit Designer
Provides a space to design redstone circuits for Minecraft without having to worry about getting around the space. Plan out your redstone circuits and make sure everything is connected properly before digging up that Minecraft field!

Audacity
An easy to use audio editor and recorder. It features a multi-track system which allows users to record live audio; record computer playback; convert tapes and records into digital recordings; cut, copy, splice, or mix sounds; and other robust features for potential audio engineers!

GNU Image Manipulation Program (GIMP)
GIMP is a free digital image editing program. It has many useful features and allows editors to work with layers that can be stacked for limitless different effects. This software is usable across disciplines for graphic artists, photographers, illustrators, programmers, and even scientists.
About Borrowing Materials from the *Discovery to Go* Collection

Checkout Policy

1) Patrons must be at least 18 years of age to check out *Discovery to Go* items (other than books and media) and have a valid OCPL Library Card in good standing.

2) Regular loan period is three weeks, with renewals allowed except for Google Cardboard and the electronic devices. Holds may also be placed for items if they are not immediately available. Extended loan periods are available to teachers.

3) Items must be returned to the Community Library of DeWitt & Jamesville’s Front Desk. *Discovery to Go* items may NOT be returned to another library or returned in any book drop. Failure to comply may result in suspension of *DTG* borrowing privileges.

Replacement Costs

Patrons must agree to pay all replacement costs associated with damage, loss or theft of *Discovery to Go* items. *DTG* items are marked with a label noting the item’s replacement charge.

If you are unclear about the cost of an item, ask the librarian in charge before checking out the item. The librarian in charge will conduct a physical check of the *DTG* item when it is returned.

Regularly overdue charges will apply at $.20/day and electronic devices will be charged $1.00/day, with a maximum fine of $5.00.