Community Library of DeWitt & Jamesville

DTG COLLECTION CATALOG

DISCOVERY TO GO!
Cool Science and Math Stuff to Check Out

The CLD&J Discovery to Go Collection is a kid-friendly collection of science, technology, engineering, and math (STEM) items that may be checked out.

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.

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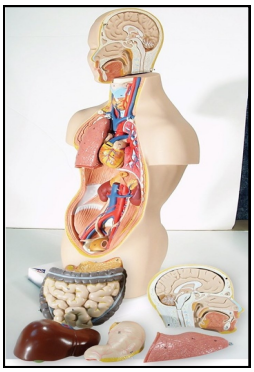
Code-a-Pillar



Mini Torso

FirstScope Telescope

Young Scientists Toolkit!

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

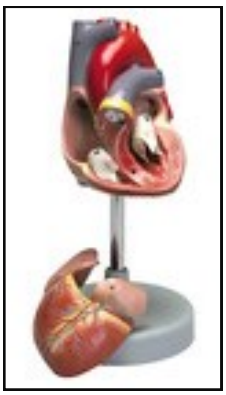
Rocks and Minerals

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

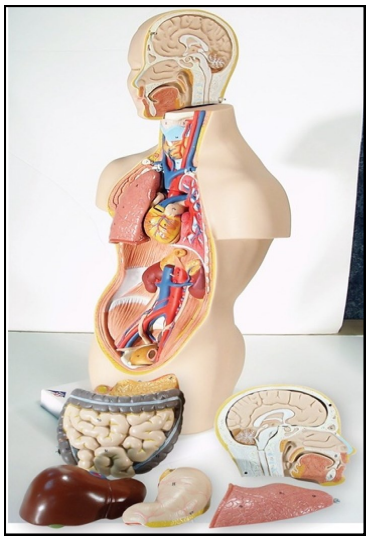


Heart

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.

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.

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*.

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.

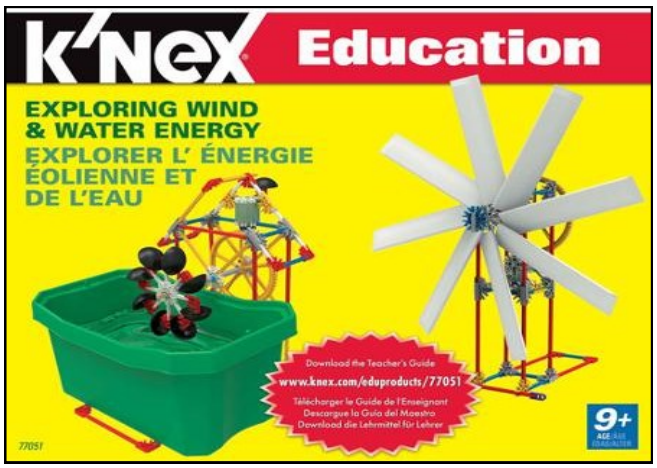
Classroom Compact Scale

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.

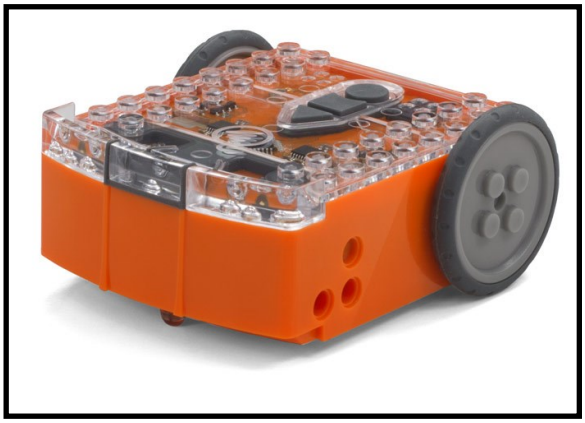


E-Blox Circuit Builder 120

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.



Edison Education Robot Kit

Edison is a programmable robot designed to be a complete STEM teaching resource for coding and robotics education for students from 4 to 16 years of age. Edison empowers students to become not just coders, but inventors, problem solvers and creative thinkers. More than a robot, Edison's sensors and expandable build system open up pathways for learning across maths, science, critical thinking, engineering, design thinking and more.

Tech for Budding Engineers!

Cubelets 6

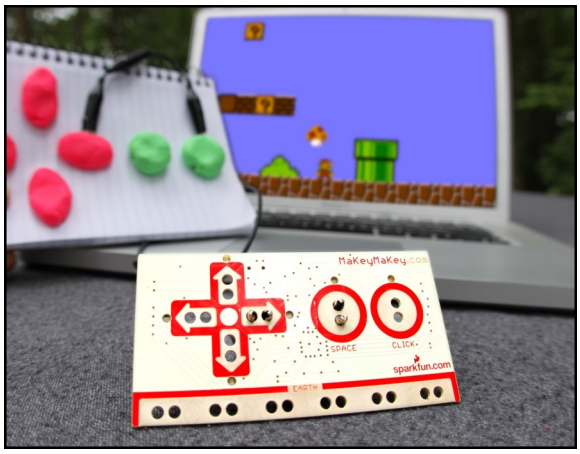
One of the simplest robot-building kits available, this pack features cubes that snap together with magnets and send signals to each other. The kit has 2 input blocks: a brightness sensor and a distance sensor, and 2 output blocks: a flashlight block and a drive block. Putting these blocks together and 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

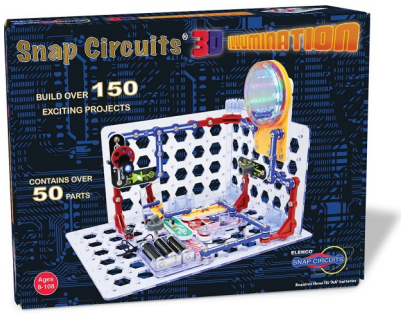
MaKey MaKey is an invention kit for the 21st century. Turn everyday objects into touchpads and combine them with a computer and the internet. It's a simple and fun Invention Kit for Beginners and Experts doing art, engineering, and everything in between. Anything that conducts electricity can be a controller 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.

Snap Circuits!

Snap Circuits 3D Illumination



Snap Circuits®3D Illumination uses building blocks with snaps to build the different electrical and electronic circuits in the projects. Each block has a function: there are switch blocks, light blocks, battery blocks, different length wire blocks, etc. These blocks are different colors and have different numbers on them so that you can easily identify them. Build over 150 projects or combine with other sets to build even more unique structures.

Snap Circuits 3D M.E.G.

Snap Circuits® 3D M.E.G. (Magnetics-Electronics-Gears) helps you learn the basis of electricity, engineering, and circuitry! Snap Circuits® 3D M.E.G. uses building pieces with snaps to make realistic, 3D circuits, similar to those found in homes, electronic equipment and skyscrapers. Snap Circuits® Kids can build their own house with roof lights and ceiling fans while finding out how all the electric and mechanical functions work! Learn about rotating lights, security systems, how to vary speed of a fan, how to make motors run more efficiently, how switches can be controlled by magnets, how generators work and much more!

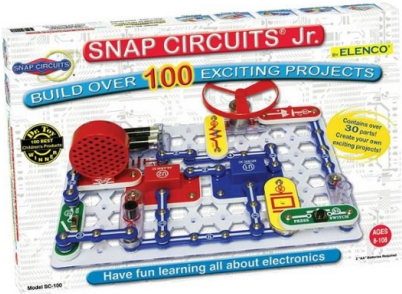
Snap Circuits Arcade

Snap Circuits® Arcade is an exciting introduction to problem-solving, following directions, and the satisfaction of a job well done. It's fun like an Arcade while supporting a vigorous STEM curriculum. Snap Circuits® uses building pieces with snaps to assemble different electronic circuits on a simple "rows and columns" base grid that function like the printed circuit board found in most electronic products. Each component is easily identifiable by a different color and functional purpose. Learn the basics of electricity, engineering, and circuitry with full color, curriculum rich, easy-to-follow instructions.

Snap Circuits Motion

Snap Circuits Motion is an exciting electronics kit that offers immense learning potential. A combination of electricity and motion, it takes two exciting topics in physics and blends them into one fun, hands-on product for exposing junior scientists to two crucial STEM concepts. The projects included in the manual boast clear, easy-to-follow instructions and explanations for what each constructed device does, making them accessible to kids with even very little experience in electronics or making.

Snap Circuits Junior



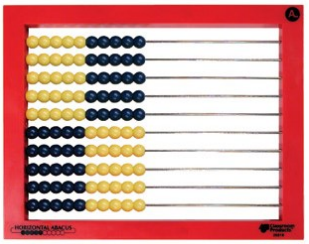
Excite young minds with this Snap Circuits Junior 100 Experiments kit. Its 30 pieces and illustrated instructions let kids aged 8 and up learn about the science behind electronics through hands-on projects. The tool-free design of this Snap Circuits Junior 100 Experiments kit ensures assembly and play are fun and easy.

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.

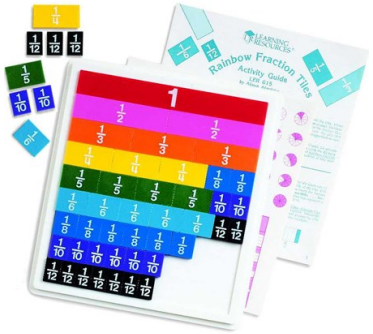


Two-Color Counters

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.



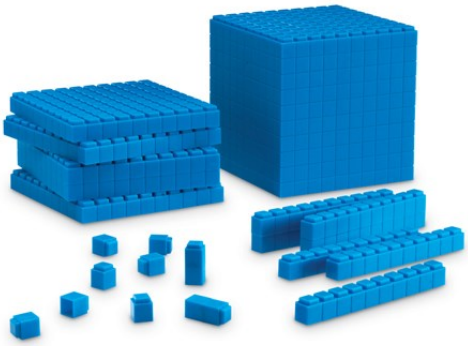
Brackitz

Unique, connect-anywhere Brackitz attach to planks at any angle, enabling builders to construct everything from small scale to #D structures. With plastic planks and rotating pieces, anyone can create structures with moving parts. Brackitz bring science, technology, math, and engineering principles into play.

Math You Can See & Touch!

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'Conner.



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

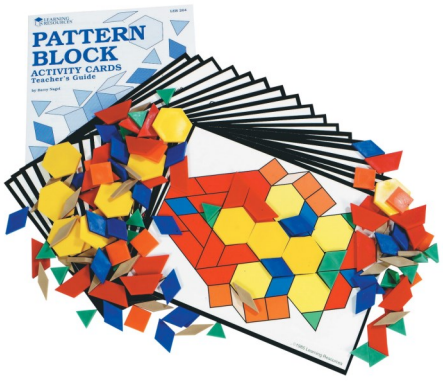
Help students make connections in math with these colorful, engaging manipulatives. Plastic rods snap together to clarify addition, subtraction, multiplication, division, fractions, decimals, geometry, measurement, patterns, algebra and probability concepts in a visual and tactile way. Connecting feature 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.

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.*

Super Shapes & Patterns!

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

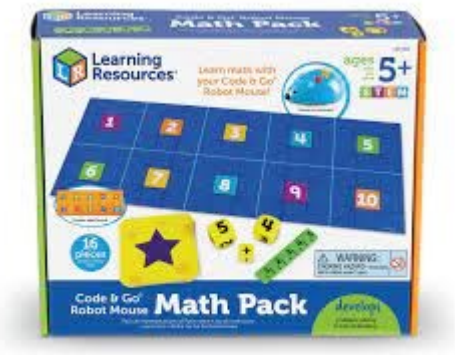
Invented in China, the tangram is a 7-piece square puzzle that has challenged learners of all ages for over one thousand years. What do you get when you cross this classic puzzle with a strikingly fresh color palette? Simply, Brights!: teaching tools you can trust, in colors they'll embrace. Tangrams 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*.

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.

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.



Code and Go Math Mouse Pack

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.

Code and Go Robot Mouse

Jack, the fully programmable robot mouse, is ready to follow commands to teach hands-on coding concepts! Create a step-by-step path for Jack using the 30 double-sided coding cards to provide the perfect introduction to coding concepts. Jack lights up, makes sounds, and features 2 speeds and colorful buttons to match coding cards for easy programming and sequencing. Set includes Activity Guide. Jack can also be used with the STEM Robot Mouse Coding Activity Set for more play options, learning opportunities,

Think and Learn Rocktopus

Who's ready to rock? This musical octopus sure is! With three ways to play, Think & Learn Rocktopus™ helps kids explore a variety of musical styles while learning about different instruments, rhythmic patterns, and more. Rocktopus™ comes with 15 musical instruments for preschoolers to mix (and remix) and let their creativity flow! Download the free Rocktopus™ app and let your mini-maestro create their own music videos with their new composing pal!

DTG Junior!

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.

Botley the Coding Robot Activity Set

The Botley the Coding Robot Activity Set makes coding fun! Botley is here to introduce coding to children, as young as 5, in an easy, friendly way. They can learn to code with Botley, and with his advanced features, he’ll grow with them for many years to come. Botley is ready to use right out of the box. The kit includes a 77-piece activity set. When you program Botley using the included Remote Programmer, you are engaging in a basic form of “coding.” Beginning with the very basics of sequence programming is a great way to get started. It helps teach and encourage: basic coding concepts, advanced coding concepts like if/then logic, etc.

GeoSafari Jr. Kidnoculars

The only binoculars designed specifically for little kids! Enlarged focus-free eyepieces-more than three times the size of ordinary binoculars-and perfect-fit goggles with placement guide enable kids (even toddlers) to see up close! Psst...They're Learning!
Encourages nature and bird watching
Learning time exploration
Fun introductory science tool
Built kid-tough and designed to last for years

Computer/Tablet Apps to Build Skills!

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!

ECOSYSTEMS HD: Edshelf Age Level: 4+
Every wondered why plants and animals have specific adaptations? Why do plants in the rainforest have drip tip leaves? Why do conifers have needle leaves? Why does the jackrabbit have large ears? How has the camel adapted to the desert? What are some adaptations of marine organisms?

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.

STARWALK KIDS: Vito Technology, Age Level: 4+
Star Walk Kids is a children's version of the famous astronomical application Star Walk. Star Walk Kids encourages free exploration with virtual planetarium where children can learn fun facts by watching animations and listening to brief explanations.

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.

DTG Collection Policies

About Borrowing Materials from the *Discovery to Go* Collection

Checkout Policy

1) Patrons must be a 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 $2.00 a day with a maximum fine of $20.00.

Library Hours

Monday - Thursday
10:00 am - 9:00 pm
Friday & Saturday
10:00 am - 5:00 pm
Sundays
1:00 pm - 5:00 pm
Summer Hours Vary

Community Library of DeWitt & Jamesville
CLDandJ.org | 315 446-3578 | 5110 Jamesville Rd. DeWitt, NY 13078