

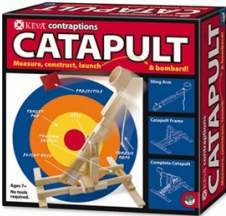




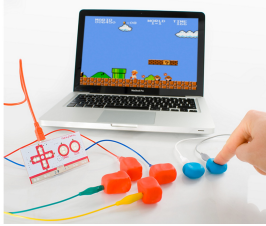
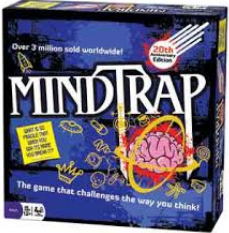

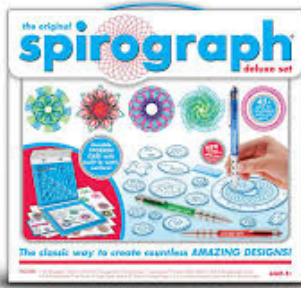


Program Item	Description	Uses
 <p>Q-BA-Maze Stunts http://www.q-ba-maze.com/</p>	<p>Designed by an architect this construction kit allows one to build complex marble runs using easily interchangeable small plastic buckets and groves. This set comes with some additional items such as a hose, trampoline and funnel as well as a large number of metal marbles.</p>	<ul style="list-style-type: none"> • Building & construction STEAM projects • Can easily be integrated into maker programs. • Can be used as learning tool/prototype for constructing marble runs using recycled materials; cardboard & egg cartons • With 3D software patrons can design their own runs, and interchange and print parts on a 3D printer
 <p>KEVA Contraptions Building Set (200) http://www.kevaplanks.com/</p>	<p>Structurally sound blocks that enable the creation of very elaborate structures. The proportions are created based on engineering principles & the blocks can be used vertically, horizontally, or on their side. The website offers some spectacular examples of how the KEVA blocks have been used in school and library programs.</p>	<ul style="list-style-type: none"> • Hold a community building challenge • Integrate with Lego Clubs or Maker programs • Check out and see physics KEVA demos on YouTube that show spectacular builds using Blender 3D software • Use to make Marble runs
 <p>KEVA Catapult Building Set http://www.mindware.com/keva-catapult-a2-48143.fltr</p>	<p>This stand alone set includes some basic KEVA blocks, as well as, all the pieces needed to create the catapult, including the target, and lightweight library friendly balls to test it out. Catapult is constructed with Wood Glue – can only be built once, but can be reused once built.</p>	<ul style="list-style-type: none"> • Great for Science Demos • Can be used outside during SRC • Showcases levers and can lead to building catapults out of other types of materials • Good for small groups – and needs to be kept separated so that pieces do not mix with other kits • Catapult completion! • Integrates Math, Science & Engineering

 <p>KEVA Trebuchet Building Set http://www.mindware.com/keva-trebuchet-a2-52131.fltr</p>	<p>This stand alone set includes some basic Keva blocks, as well as, all the pieces needed to create the trebuchet, including all pieces needed for construction. Trebuchet is constructed with Wood Glue – can be built once, but reused once it's built.</p>	<ul style="list-style-type: none"> • Great for Science demos • Can be used outside during SRC • Showcases levers and can lead to building catapults out of other types of materials • Good for small groups – and needs to be kept separated so that pieces do not mix with other kits • Catapult completion! • Integrates Math, Science and Engineering
 <p>JOINKS – Building Set www.fatbraintoy.com</p>	<p>Building Materials made of wood and soft rubbers connectors. Bendable and bouncy when constructed. Also comes with suction pieces that enable one to build against the force of gravity.</p>	<ul style="list-style-type: none"> • Create drawings and blueprints and then build the shape • Create 3D circular objects that bounce • Test the limits of gravity • Great for any children's program, SRC, or maker-themed Program.
 <p>STRAWS & CONNECTORS http://www.strawsandconnectors.com/</p>	<p>Similar to Joinks, but not flexible. Can help to construct, build and conceptualize ideas.</p>	<ul style="list-style-type: none"> • Tallest tower challenge • Build a spaceship • Work collaboratively to create one large structure of several structure • Great for indoor or out door use

 <p>MAKEDO http://www.make.do/</p>	<p>Kit includes plastic kid safe tools that enable building large and small structures using cardboard and other lightweight recycled materials. Lots of examples available on-line for ideas. Can be used in conjunction with plastic zip ties and other inexpensive building materials. Items built can be displayed in the library, however need to be disassembled for reuse.</p>	<ul style="list-style-type: none"> • Build a book reading fort, or other pieces of cardboard furniture • Great for giving younger kids exposure to tools • Can be worked into a one off or a multi-week program
 <p>MAKEY MAKEY http://www.makeymakey.com/</p>	<p>Circuit board that connects to the computer and internet and enables the creation of simple, and complex circuits. Easy to use, and can be integrated with games, and on-line instruments. Lots of great projects available on-line.</p>	<ul style="list-style-type: none"> • Banana/Fruit Pianos and Bongos • Creating large circuits with people • Using copper tape and batteries to great larger instruments or other projects • Interfacing with Mine Craft and retro games for more interactive experience
 <p>Mind Trap Game http://www.outsetmedia.com/brands/mind-trap</p>	<p>Problem solving based questions and trivia. Up to 4 players but could be integrated into other programs. Canadian made.</p>	<ul style="list-style-type: none"> • Hold a board game night at the library • Can be used with Jeopardy style software to develop a larger group game • Can be used for trivia nights • Gaming Clubs
 <p>STRATUM http://www.familygamesamerica.com/</p>	<p>Strategic 3D building game that incorporates hexagonal shapes into a checker-like board. Great for activating Math, Spatial Reasoning and Problem Solving Skills.</p>	<ul style="list-style-type: none"> • 4 Player Game – good for a drop-in activity for youth • Pieces can also be used for building and stacking, and tracing



Spirograph

<http://www.originalspirograph.com/>

This classic activity has been around since the 1950's and uses mathematics and geometry to create some amazing designs and tessellations, many of which can also be recreated digitally. Excellent at merging Math, Science and Art.

- Make designs, cut them out & create large collages of the work
- Replicate the patterns using tessellation generating software
- Using the Spirograph as a model to create gears & replicate this on a larger scale
- Create a large pendulum and discuss fore, movement, repletion both artificially generated and in nature



WOLVERINE SLIDE/NEGATIVE CONVERTER

<http://www.wolverinedata.com/index.php/site/quicklinks/C72/>

Easily converts slides and negative into JPG formats. Easy to use low barrier tech. Images can be saved on a memory stick or directly onto laptop hard drive.

- Convert Images & have patrons create collages or digital scrap books using JPGS
- Create a memory project for the library archiving photos from the community
- Use Photoshop to convert images into buttons



Button Maker

<http://peoplepowerpress.org/>

A great well used addition to many Maker Spaces. Button Makers come in different sizes, and we recommend 2.5 inches as a good start as the button will be large enough to be draw on should patrons want to create their own. Button shells and various additions are sold separately.

- Button Design Contest
- Create Buttons our of old images, collages, photos
- Interface with free images from Creative Commons
- Use for promotional purposes for events



Google Cardboard
<http://www.imcardboard.com/>

This contraption allows users to experience immersive virtual reality using their smart phone powered by the Google Cardboard app. (available for IOS and Android) and a piece of cardboard. Also available in foam, and a new plastic version is also on the market. Low barrier and easy to integrate into projects. Note it does not work with an I-pod.

- Many gaming apps. Available to be used with Google Cardboard, as well as immersive experiences and concerts
- Google Cardboard App. has great demos including Google earth
- Great for Maker Festivals or Maker Days as a station for patrons to try out