



Children's
TECHNOLOGY
REVIEW EXCHANGE

February 2018



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Puppy Love**

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**Children's Technology Review
February 2018**

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** Denotes "Editor's Choice."*

"Facebook's powerful Messenger Kids will open a much-needed line of communication between children and parents. We applaud this type of leadership." From the KAPi Award Juror Comments, at www.kapiaawards.com

"It's galling to see Facebook target young children at a time when evidence is mounting that excessive social media use negatively impacts kids and teens' well being. Silicon Valley executives must decide if they care about the welfare of children, families, and society, or only about hooking users and pursuing profits." The Campaign for Commercial Free Childhood, From <http://bitly.com/2DTxHA5>

So... who's right? Is Messenger Kids leadership or simply all about hooking page views earlier?

In an essay called "Facebook's Messenger for Kids Comes Under Attack; We Gave it An Award" the KAPi award creator Robin Raskin provides lends some clarity to both positions. Raskin, a former Editor of Family PC and frequent Dust or Magic speaker writes:

"Is Messenger Kids perfect? Not by a long shot. Are their ulterior motives? Possibly. Does Facebook want to prime the next generation as users? You betcha. So does Apple and Microsoft with their ambitious offerings into schools. Are kids as young as six too young to be texting? That depends. Once a day to a travelling parent? A way to do homework with a friend? There are a host of good reasons for kids to learn to text. We applaud the efforts of the Campaign for Commercial-Free Childhood for have people think of the consequences before they adopt a technology. What the group misses, though, is that screen time is no longer separate from active time and that kids are surprisingly versatile at intermixing the two. And like it or not most kids are using devices and tablets, often to message people. Speaking for the KAPi judges we're going to stick by our award. The more you can tie the family together in online activities, the better off you'll be."

As one of the dozen jurors for this year's KAPi award, I agree with Robin's position, and feel that it is important for all adults to know the specific strengths and weaknesses of any new product. Providing objective knowledge is the mission of CTR. If you're curious about Messenger Kids start with the full review at <http://reviews.childrenstech.com/ctr/fullreview.php?id=19775>. Let us know what you think.

Enjoy the issue, and have a happy February!



Save these dates!
www.dustormagic.com

March 25, 2018 • Bologna Masterclass Meet and debate current technology with children's publishers at the world's largest children's publishing event.

June 1-3, 2018 • AppCamp The West Coast edition of Dust or Magic, at the Asilomar Conference Grounds. \$1480/seat.

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- There is no sponsored or advertising content of any variety.
- Complete transparency. We make every effort to disclose review criteria and sources of potential bias.
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5 (or so) sites & 10 videos

Puppies

LittleClickers
Safe, fun Internet
explorations
for children

Computer
Explorers

LittleClickers is brought to you by Computer Explorers, who offer camps on programming.

Visit www.computerexplorers.com to learn more. The web-based (html) version of this page is at

<http://www.littleclickers.com> with live links, plus a place to report any errors. Note that CTR and COMPUTER EXPLORERS do not have commercial interests in the sites listed on this page. Librarians and teachers are permitted to copy this page for non-profit use. To suggest a future topic, or to report a bad link, please contact the editor, Warren Buckleitner [WB] warren@childrenstech.com or call 908-284-0404 (9 - 3 PM, EST). Thanks to Dr. Ellen Wolock for her help with this issue of LittleClickers.

Read this column online, with links, at www.littleclickers.com/puppies

1. What is the biggest dog in the world?

According to Mother Nature Network, the Great Dane wins this award. They can grow to over 200 pounds! Fortunately there are very gentle. <http://bitly.com/2np04yV>.



2. What about the smallest dog in the world?

Read about a tea cup sized Chihuahua named Millie at <http://dailym.ai/2nnxpas>

3. How long does a dog live

most dogs live about 14 years, but it depends on the breed. <http://bitly.com/2nmRT38>

4. Smartest dog.

Dog intelligence comes in many forms... just like people! But if you want a highly trainable pup, go for a Border Collie, according to WebMD. See the other trainable breeds at <http://bitly.com/2DWBFbl>

5. Who has a better sniffer -- you or your pup?

A typical dog can smell 10,000 to 100,000 times better than you can. At PBS Nova's site <http://to.pbs.org/2nzteaF> you learn that if you make the analogy to vision, what you and I can see at a third of a mile, a dog

could see more than 3,000 miles away."



APPLICATION

Get a dog! There are many online databases designed to make a match between a home and a puppy. Here are two:

Petfinders <https://www.petfinder.com>

Adopt a pet. <https://www.adoptapet.com/dog-adoption>

Take some fun dog photos! Here's our favorite place for fun dog photos. <https://www.instagram.com/chasingchara/>

Puppies on YouTube

Want more? Here's a video playlist that go along with this column

<https://www.youtube.com/playlist?list=PLcBVHzUUEKwk7OXQcl7mKZXTKfSYm5Lg3>



You asked: So here are 12 math gems

by Warren Buckleitner



Here's a fact: the CTREX database is packed with hidden learning gems. In celebration of this release of **Slice Fractions 2**, we decided to dig up a few classics that should be on every child's screen.

FOR YOUNGER CHILDREN

Montessori Math: 1st Operations, Edoki Academy, for ages 5-8. Maria Montessori would like this set of innovative activities, especially the number spitting game where you place your fingers on both sides of the multi-touch screen. There's also a set of dynamic number tables that help you visualize the underlying patterns in numbers and number relationships. The first menu is cluttered, But don't let that slow you down from downloading this app immediately, especially if you have an interest in helping young children learn about math concepts. See also Montessori Math: Add & Subtract Large Numbers, the big brother app to this one. <http://reviews.childrenstech.com/ctr/fullreview.php?id=17066>

Moose Math, Duck Duck Moose, for ages 5-up. App number 17 from Duck Duck Moose covers early elementary (Kindergarten and First Grade) math by way of some solid counting, sorting and classifying games. Each game lets children playfully master skills that will provide an excellent foundation for later math learning, and the games are paired with an individualized record keeping system, that stores progress and profiles for each child. Math educators will appreciate the fact that this app is 100% flashcard free, yet still manages a good deal of leveled practice. This app can store an "unlimited" number of student profiles, meaning a teacher of 25 could have individual bookmarks and records for every child. Not a bad deal for a free app. See also Park Math and Fish School for well designed Duck Duck Moose titles.

Video Link: http://youtu.be/XKe-uaX_H00
<http://reviews.childrenstech.com/ctr/fullreview.php?id=17093>

Up to 100, Marbotic marbotic.com, (\$2.99 on iPad, Android), for ages 5-7. This app is designed to help children learn to identify and pronounce each number from 0 to 100, and they can see the quantities with Montessori's beads. It features six activities "inspired by Montessori pedagogy". The activities let children play with numbers in order to understand the ten and one places; find a number in a series of digits; recognize numbers written out; recognize the pronunciation of numbers; and manipulate quantities with a set of beads. There is also a wooden toy available that interacts with your tablet. If you Purchase the toy, the app can be downloaded for free. There is no advertising or in-app purchases.

Video Link: <http://youtu.be/fBi0TqeZsYk>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=18324>

Grandma's Preschool, FairLady Media, Inc., (\$2.99 on iPad, for ages 3-6. Can a classroom be fun to explore? This one is, especially when there's a zany Grandma as the teacher. A dozen no-fail school-themed activities and 13 videos are waiting in Grandma's Preschool, where just about anything you touch does something school-related. The activities are well designed to playfully reinforce early math and reading skills. Activities include moving train cars to match colors to words, fingerpainting, match stuffed animals to napping children, planting and watering seeds, match

numerals with number words and pass out snacks. None are very deep; and children are never trapped. But all are well designed to insure a successful first experience of short high frequency words, color words, seasons, shapes, letters and letter sounds and spatial relations. This is the fifth in the "Grandma" series of apps from Fairlady Media.

Video Link: <https://youtu.be/Hfb5vHKdvpA>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=18618>

Loopimal, Lucas Zanotto (\$2.99 on iPad), for ages 2-up. Like Garage Band for toddlers, this app turns your iPad into a looping musical toy -- in the key of C -- with six moving animals. You discover that you can "program" the animal motions by dragging and dropping sounds onto one of the eight spots on a sound stage. Because each sound icon results in a different effect, you're suddenly making inter-related loops. This app was made in Finland from the makers of Drawnimal. All of the tunes are in C-major, which makes it easy to use this app as a rhythm section, for playing along (the white keys on the piano). The sound design and music was created by Ulrich Troyer. Video Link: <http://youtu.be/btLfLoWhYks>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=18637>

Montessori Numbers: Learn to Count from 1 to 1000, L'Escapadou, (\$2.99 on iPad), for ages 3-7. This early math app was originally published in 2012. The 2016 update contains some noteworthy features including two additional number sandboxes (from four to six) that are ideal for letting a child freely tinker with early mathematical relationships in a concrete way.

1 to 20 (the first menu option) starts by offering a choice between three levels: 0 to 5, 0 to 10 and 11 to 20. You can then freely drag-and-drop blocks to build the numbers, in order. When your set is complete, you are rewarded by a block building activity, where everything on the screen can be moved around or stacked. We especially liked how this app mixes structure with free exploration. After you solve a problem, you can freely mix and match numerals or blocks on the screen, making whatever you like. This free play mode can also be turned off if you like. This is a must-have app, for any early learning setting.

Video Link: <https://youtu.be/ZGHtJk058jM>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=19154>

FOR OLDER CHILDREN

Attributes by Math Doodles, Carstens Studios, (\$2.99 on iPad, for ages 6-up. Seven hand-illustrated, mind-bending math activities bring the essence of math problem solving to your multi-touch screen. This app represents some of the best work yet from mathematics advocate Daren Carstens. Each activity can be customized in a variety of ways dynamically, either by an nearby adult or by the learner him/herself. So there's always a challenge, and children feel in control of the experience. Need to know: The if/else activity is especially useful for beginning programming settings.

Video Link: https://youtu.be/zNoRttm_44c
<http://reviews.childrenstech.com/ctr/fullreview.php?id=18608>

DragonBox Numbers, WeWantToKnow AS, (\$7.99 on iPad, iPhone, Android), for ages 4-9.

Early math teachers have been dreaming of an app like this for decades. Imagine a magical set of living color coded unit blocks (like Cuisenaire Rods) that you can slice into parts (for subtraction) or feed to one another (for addition). Mix in a familiar Angry Birds style leveling system, a "Cut the Rope" game mechanic for subtracting, a bit of finger painting for numeral recognition, and then use money (with place value application) to unlock the puzzles, and you have the year's all time best early math pedagogy experience.

At the core of this app are the ten blocks, called Nooms. Each comes with set of eyes and is color coded. They can be freely stacked, sliced, tossed, combined, sorted and compared. As you play, you start discovering the relationship between number, numeral and length; all while a clear narrator describes the relationships.

Video Link: <https://youtu.be/pqEMhxJV-g4>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=18915>

NumberGym's TableTrainer, NumberGym Software, for ages 8-12.

Ready for a strong dose of straightforward math facts practice? Designed in the UK, this app is one of a series of teacher-designed experiences that have been recently converted from Flash experiences to apps for mobile devices. This particular app turns your iPad into a customizable set of timed times tables drills. You drag the short math equation toward the answers, which are arranged in a circle. Because there are up to ten answers, you are forced to solve the equation rather than take a guess. Your progress is saved to a classroom control panel. Elementary teachers will like the child pacing in this app. There are no instructions or reinforcements to clog up the problem solving, and children are only limited by their own thinking. The menu structure also empowers the child to let them change levels or problem sets.

If you're looking for anything other than math drill (such as creative problem solving), you won't find it in this app. Also we couldn't figure out how to create a school login from within the app; a process that should be better defined. Content in the \$1.99 app includes 23 multiple-choice style math topics, including 11 factors (x 2 through x 12). You can also choose to mix up the problem presentation if you like. Each table has 3 stages: answers ordered, answers mixed and division facts. The problems appear in random sequence. All in all, if you're a teacher, you should be aware of NumberGym. Other apps in the series include BondBuilder and Mental Maths Challenge, all with a similar design.

<http://reviews.childrenstech.com/ctr/fullreview.php?id=19337>

Teachley: Fractions Boost, Teachley, LLC, (\$3.99 on iPad, iPhone), for ages 8-11.

Hands on math pedagogy comes to the racetrack. You drive by tilting your screen like a steering wheel, to try to drive your car through a gate, using a fraction clue as your key.

For example, if you are given a target fraction of $\frac{1}{2}$, you must hit the gate in the center. If you miss, you are given a set of well designed tutorials that illustrate how fractions work. This app is especially good for fraction drill. It is backed by intelligent pedagogy that quickly rewards mastery, and supports the building of understanding. There's a school version of the app that syncs with classroom accounts, letting you personalize the experience. Need to know: Turn off the looping music in the teacher's

settings.

Video Link: <https://youtu.be/FX2RHtIovMA>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=19691>

Math Tango, Originator, (\$free with IAP of \$12 on iPad, iPhone, for ages 6-9.

Explore a playful, animated island that is home to a family of friendly musical monsters. Your objective: to earn more monster crystals by playing addition and subtraction problems. Content includes 25 monsters, 24 missions and 50 store items that can be added to your island.

This iOS (only) app provides a fun context for the math. Progress is bookmarked automatically. There's a nice variety of math problems although multi-touch is not employed, making it harder for more than one child to play. The challenge increases with correct answers, that also unlock more friendly monsters and coins. Created by Originator Inc., makers of Endless Alphabet. A one-time in-app purchase unlocks the app forever. Standard pricing will be \$11.99, but with special 2 week pricing at launch of \$6.99.

Video Link: <https://youtu.be/fpMDRcrjXa0>
<http://reviews.childrenstech.com/ctr/fullreview.php?id=19754>

Slice Fractions 2, Ululab Inc. <http://ululab.com>, (\$3.99 on iPad), for ages 5-12.

Our favorite baby mammoth is back, in the second version of Slice Fractions for iOS only. You must solve clever problems to help the Mammoth get his stolen hat back with the support of creatures that move, multiply and reveal hidden fractions. The 100 puzzles are scattered throughout three worlds, starting easy and getting extremely challenging. Thankfully there's a reset button lets you retry your ideas over and over again. The underlying mathematical concepts in this app are solid, as is the pedagogy. But it's been done without reducing the pure joy of the problem solving. Apps like this one remind you of the potential of the touch screen medium for exploring challenging mathematical concepts, in a playful way. The content comes from UQAM. This is a paid app with no ads or IAP (in-app purchases).

Video Link: https://youtu.be/a3Yp_IB-XNc
<http://reviews.childrenstech.com/ctr/fullreview.php?id=19790>



Spatial Learning and STEM: What are we missing?

Educators who want to help children get a leg up in STEM (Science, Technology, Engineering and Math) have heard improving one's spatial ability can be a key component to success. Research (see references) has shown students who have strong spatial skills often outperform their peers in STEM subjects, and have long-term success in STEM related fields. But what exactly helps a student grow their spatial aptitude? Let's take a closer look.

Young child who have access to building experiences and construction toys is a good first start. Wooden blocks, Lego, Mega Bloks, K'Nex, Meccano Erector Sets, TinkerToys all are helpful in exposing young children to spatial concepts that might carry into STEM studies and careers. No wires or batteries required.

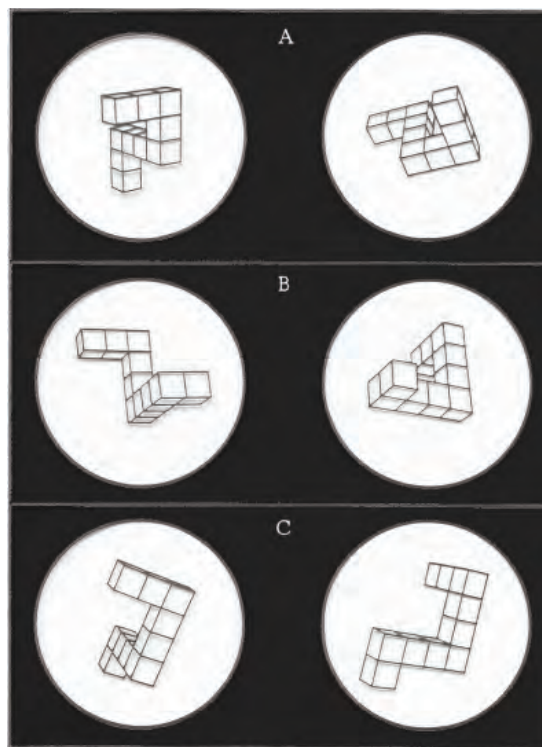
Playing with apps and video games, flying drones and programming robots can provide additional opportunities to engage in spatial thinking. But it's worth pointing out some differences in what spatial skills are learned in each medium.

In the world of video games, reading a map and navigating space as a player is a common game mechanic. It's an element of spatial understanding most players have mastered. Minecraft and Roblox are popular examples. (Ironically, very little research has been done to understand the benefits of using these games from a spatial learning perspective.)

Other less known apps such as Blox 3D World by Appy Monkeys Software and Lightbot by LightBot Inc. also require navigating through and around a 3D space. (Reviews in CTREX).

Programming robots is another method often used to navigate space. A student is asked to write few lines of code that will move a robot from point A to point B on a map. Two different skills are used to complete this task. First reading a flat two-dimensional map, and second translating that information in one's mind to navigate a three-dimensional space with your robot. Such exercises can flex one's spatial muscles. But reading maps and navigating space in the real world is just one part of spatial understanding. There are others as well.

A growing body of research demonstrates other spatial exercises could help improve a student's spatial abilities further still. These examples look inward instead of outward. For example, the ability to mentally rotate an object in one's mind has huge benefits to increasing one's spatial



Above: From a 1971 Science article by Shepard and Metzler.
Below: Foldify.



abilities. Folding a two dimensional object in one's mind into a three dimensional object is another.

Changing the perspective of an object, or even visualizing what an object would look like if cut in half, all great exercises that strengthen one's spatial ability. It's these latter approaches that are often overlooked in a classroom setting, and are exercises that provide great benefits in STEM-focused classrooms and careers.

Spatial exercises like these were first seen with Nintendo's Brain Age games and the Big Brain Academy titles for the Nintendo DS platform, but have rarely been seen since. Occasionally you can find a rather clinical implementation of these spatial exercises that are not designed for kids. However, there are a few hidden gems worth knowing about that explore this other spatial domain.

Relationshapes by VisuVizu is one of my favorite examples. Players young or old position, rotate, scale and match 2D

shapes. It's a great app for practicing 2D mental rotations.

klocki by Rainbow Train is another great 2D mental rotations game.

Cyberchase 3D Builder for PBSkids by Curious Media. Folding paper (or Cardboard) is an under utilized exercise for building spatial abilities. Folding 2D nets into 3D objects provides a great opportunity to practice mental folding.

Foldify by Pixle. A fun craft like exercise that also helps users see the relationship of drawing on a 2D surface and how that 2D information is translated to a folded 3D object.

Crafty Cut by Touch Press is a rare gem, and a hard to find spatial experience known as mental cutting. Users try cutting a 3D object to a desired 2D shape.

Any student, or adult, who might be challenged by weak spatial abilities can strengthen their skills through practice of these games and activities.

Further reading:

CTREX Listing of 690+ Interactive Products tagged for Spatial Learning (search conducted 2/1/2018) <http://bitly.com/spatial-learning>

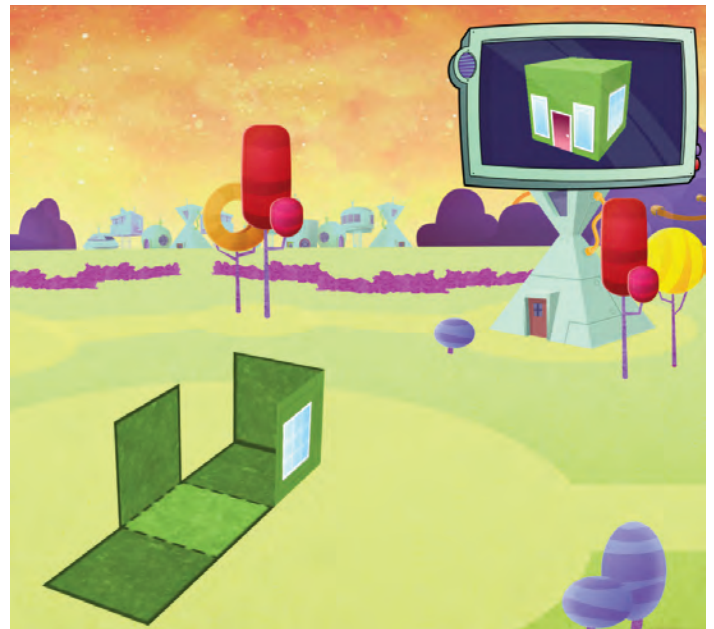
Newcombe, N. (2010). Picture This: Increasing Math and Science Learning by Improving Spatial Thinking. *American Educator*, 86m 29-43. Retrieved from http://www.qwww.spatiallearning.org/publications_pdfs/Newcombe_000.pdf

Shepard, R. N., & Metzler, J. (1971). Mental rotation of three-dimensional objects. *Science*, 171(3972), 701-703. <http://dx.doi.org/10.1126/science.171.3972.701>

Uttal, D. H., & Cohen, C. A. (2012). Spatial Thinking and STEM Education. When, Why, and How? *Psychology of Learning and Motivation - Advances in Research and Theory*, 57, 147-181. DOI: 10.1016/B978-0-12-394293-7.00004-2

Uttal, D. H., Meadow, N. G., Tipton, E., Hand, L. L., Alden, A. R., Warren, C., & Newcombe, N. S. (2013). The malleability of spatial skills: A meta-analysis of training studies.

Scott Traylor is a former computer science teacher and the vice president of software design at Wonder Workshop. He's also the founder of 360KID and a consultant to many children's interactive businesses and products, none of which are mentioned in this article.



Cyberchase 3D Builder



Feature Reviews and New Releases

FEBRUARY 2018

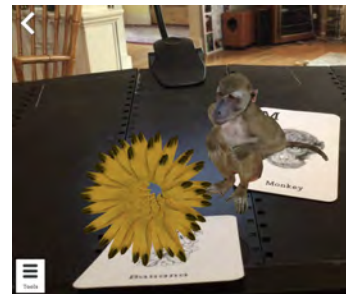
Here's an alphabetical listing of both the feature reviews (with ratings) and the new and future releases. "Entry Date" refers to the date we first learned of the product.

Animal 4D+

Animal 4D+ is a \$15 pack of cards, with 26 illustrations of an animal, representing each alphabet from A to Z. You can stack the cards side by side to see how they interact.

Animals include an Ant, Giraffe, Horse, Elephant and Iguana. We were impressed by the level of detail with each animal. This experience has a high novelty effect, but it is hard to study the animals for more than a minute. If your objective is to learn in-depth information about animals and what they eat, this is not a good app. Also keep in mind that you must own the printed cards in order to access the app content.

Details: Octagon Studio, www.octagonstudio.com/en/. Price: \$free/\$15. Ages: 3-8. Platform: iPad, iPhone, Android. Teaches/Purpose: science. Rating (1 to 5 stars): 3.9 stars. Entry date: 1/17/2018. []



Ease of Use	7	78%
Educational	7	
Entertaining	9	
Design Features	8	
Good Value	8	

Botley the Coding Robot

There are no apps, tablet or iPhone required to use this \$60 rolling robot that is powered by 3 AAA batteries. Instead, you drive it around (or send it commands) with a custom remote control. An optical sensor on the bottom lets Botley follow black lines, and a front IR sensor lets you avoid collisions. Programs are created by pressing a sequence of direction commands, and then executing the batch with a big green go button. There are sounds associated with each command, which you have to keep in your mind as you count out each number of steps. That makes this robot hard to use, but it also is a good memory exercise. A set of jigsaw puzzle shaped tiles let you create courses. See also Code & Go mouse.

Details: Learning Resources, www.learningresources.com. Price: \$60. Ages: 5-12. Platform: Smart Toy. Teaches/Purpose: spatial reasoning, Mathematics. Entry date: 1/23/2018.



Find Them All: My Pets

From Paris based Knbmedia comes a simple hide and seek experience featuring real photos of pets. This is the fourth in the "Find Them All" series. The more animals you find, the more features and simple games you unlock. Content includes 48 animals, with names in eight languages. Learn more about the series at <https://www.facebook.com/FindThemAll>

Details: Knbmedia, www.knbmedia.com. Price: \$free with IAP. Ages: 3-7. Platform: . Teaches/Purpose: animals, logic, language. Entry date: 1/15/2018.





Humanoid AR+

Now this is cool. Imagine a person standing in your room, directly in front of you, that you could slice up and examine, simply by moving your phone/ tablet around -- in real space.

Designed specifically for Apple's ARKit equipped mobile devices, this is an attempt to have a virtual anatomy model in the room, that you can examine up close. The slices include the skeletal, digestive and nervous system. So, for example, if you're looking at the bones, it is possible to take your device right down the spinal column, for an inside out view of the body. Note that we did not check the accuracy of the content with a doctor.

The free version of the app comes with frequent paywalls, but it is possible to preview what the app does. Don't confuse this app with Humanoid 4D+ which uses printed AR cards. Learn more at www.octagonstudio.com.

Details: Octagon Studio, www.octagonstudio.com/en/. Price: \$free. Ages: 12-up. Platform: . Teaches/Purpose: Anatomy, biology, science. Entry date: 1/17/2018.



Math Wizard - Addition, Subtraction & Equality

Imagine ... if you could "touch" an abstract, mathematical relationship? Coming this spring, this app from French designer Pierre Abel, and app that turns a touch screen into a set of virtual manipulatives. There are two modes: Playground (an open-ended editor for free experimentation) and Game (reproduce an expression or equation like $4=4$ or $-1+x=2$). A young child can freely explore the relationships that drive ideas like equality, addition/subtraction, fractions and base ten. Content covers:

- Integer numbers
- "X" variable (support for others variables such as "y" will added later)
- Expression with + and - operators
- Equation with =, >, < symbols
- It is also possible to divide by two numbers (by "cutting" them)

The app can be customized for specific needs. You can only manipulate elements according to algebra rules to reproduce the expression defined as the goal. It is possible to make your own levels for a particular child.

Details: L'Escapadou, lescapedou.com. Price: \$call. Ages: 5-12. Platform: iPad, iPhone. Teaches/Purpose: math, skills, addition, subtraction, algebra. Entry date: 1/17/2018.



My Town Bakery

Here's another solid "My Town" app. The series of approximately 20 themed apps lets you freely arrange several hundred people, objects and baked goods among seven rooms. As you explore you collect hidden stars to unlock more objects.

Other My Town titles include Haunted House, Pets, Museum, Fire Station, Cars, Beauty Contest, Cinema, Grandparents, Preschool, Hotel, Spa Beauty Salon, Dance School, Fashion Show, Wedding, Police Station, School, Stores, Daycare, Beach & Picnic, Hospital and Home.

Need to know: Compared to the Toca Life series, the art is more realistic and there are more themes, but the user interface is less smooth. Also we did not like the timing of the link to a "rate this app" page that appears immediately after you win a new prop; as well as the catalog of additional apps that is hiding behind a nondescript game control icon on the main menu. These, of course, are minor issues that a child will learn to get around. All in all, this is a fun, easy to use experience that children can play together thanks to multi-touch. It's well worth the download.

Details: My Town Games, <http://www.my-town.com>. Price: \$2.99. Ages: 4-8. Platform: . Teaches/Purpose: . Rating (1 to 5 stars): 4.4 stars. Entry date: 1/30/2018. []



Ease of Use	8	88%
Educational	9	
Entertaining	9	
Design Features	9	
Good Value	9	



My Town Pets

Here's another solid "My Town" app. The series of approximately 20 themed apps lets you freely arrange several hundred people, objects and critters among four pet themed rooms. As you explore you collect hidden stars to unlock more objects.

Content includes an animal shelter, vet office, clothing store and an animal park (try the trampolines).

There are 10 birds, 10 hamsters, 7 cats, 7 dogs, a vet, a store keeper, a nurse and a spa worker. There are a lot of props, include clothing and costumes. You can also give your people emotions, to make them laugh or cry.

Other My Town titles include Haunted House, Museum, Fire Station, Cars, Beauty Contest, Cinema, Grandparents, Preschool, Hotel, Spa Beauty Salon, Dance School, Fashion Show, Wedding, Police Station, School, Stores, Daycare, Beach & Picnic, Hospital and Home.

Need to know: Compared to the Toca Life series, the art is more realistic and there are more themes, but the user interface is less smooth. If you watch some of the testing footage, you'll note that the doors from one room to another don't always open easily, and the objects don't always interact with each other the way you'd like.

Also we did not like the timing of the link to a "rate this app" page that appears immediately after you win a new prop; as well as the catalog of additional apps that is hiding behind a nondescript game control icon on the main menu. These, of course, are minor issues that a child will learn to get around, but they should be noted. All in all, this is a fun, easy to use experience that children can play together thanks to multi-touch. It's well worth the download.

Details: My Town Games, <http://www.my-town.com>. Price: \$2.99. Ages: 4-8. Platform: . Teaches/Purpose: creativity, language. Rating (1 to 5 stars): 4.4 stars. Entry date: 1/16/2018. []



Ease of Use	8	88%
Educational	9	
Entertaining	9	
Design Features	9	
Good Value	9	

Nintendo Labo

Nintendo Labo is a snap together cardboard DIY kit that leverages the power of the Nintendo Switch system (required). Each kit starts with a pre-stamped sheet of cardboard (akin to Google Cardboard) designed to accommodate the Nintendo Switch console and Joy-Con controllers. Nintendo is calling the finished creations Toy-Con. Don't assume the cardboard = affordable. The kits start at \$70.

For the 13-key piano project, you use the Nintendo Switch console and Right Joy-Con controller. As you press the keys of the piano, the IR Motion Camera in the Right Joy-Con detects which keys are pressed and translates them into notes. The sounds come from the console's speakers.

Nintendo Lab contains two kits. the Variety Kit (\$70) and the Robot Kit (\$80). The Variety Kit lets you make two Toy-Con RC Cars, a Toy-Con Fishing Rod, a Toy-Con House, a Toy-Con Motorbike and a Toy-Con Piano.

The Robot Kit lets you make a robot costume, consisting of a visor, backpack and straps for your hands and feet which you can then wear to assume control of a giant in-game robot. Both kits include everything you need to assemble your Toy-Con creations, including the building materials and relevant Nintendo Switch software. You can also spend \$10 more to get a set of stencils, stickers and colored tape; compatible any kit. Coming April 20, 2018.

Details: Nintendo of America, www.nintendo.com. Price: \$70 per kit. Ages: 6-up. Platform: Nintendo Switch. Teaches/Purpose: . Entry date: 1/18/2018.





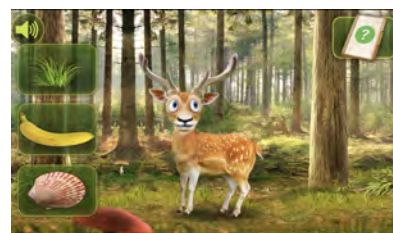
Ranger Luke

This is a side-scrolling walk in the woods. As the screen moves you meet various various forest animals. First you hear the animal (via a real recorded sound). Next drag and drop what it eats from three choices. The animal bodies look real but the faces have been digitally modified, with large eyes that blink. So fiction is mixed with a dose of nonfiction.

Content includes real sounds, and factual information about animal food. Animals include an eagle, deer, bear, hedgehog and rabbit.

This is a didactic experience that scrolls automatically, which reduces feelings of child control. Created in Holland by Educational Pigeon. Game label 'Midnight Pigeon' was founded in 2016 by Vincent van Geel.

Details: Game Drive, www.Game-Drive.nl. Price: \$free with IAP of \$.99. Ages: 2-4. Platform: iPad, iPhone, Android. Teaches/Purpose: nature, animals. Rating (1 to 5 stars): 3.8 stars. Entry date: 1/10/2018. []



Ease of Use	7	76%
Educational	7	
Entertaining	8	
Design Features	7	
Good Value	9	

Root

Due on the market "June 2018" this programmable has a hole in the middle, and magnets that allow it to climb around vertically on a magnetic white board. We had a chance try it at CES in January. The robot is controlled with a tablet (the demo was done on an iPad) via bluetooth, using an app twith drag and drop commands. The core concept is very much in line with Seymour Papert's original programmable Turtle concept. Just replace the pens with magnetic white board markers.

A built in speaker can play sounds, that might be associated with colors that it drives over. The app features games that can be unlocked, to teach children real programming languages including Python, JavaScript and Swift. Root was made by Zee Dubrovsky (formerly with Sonos, iRobot), Raphael Cherney (formerly with Apple, Microsoft), and Radhika Nagpal (Harvard).

Details: Root Robotics, www.codewithroot.com. Price: \$200. Ages: 4-12. Platform: Smart Toy, iPad, iPhone. Teaches/Purpose: Art/Creativity, planning, Mathematics, coding. Entry date: 1/17/2018.



Slice Fractions 2

Our favorite baby mammoth is back, in the second version of Slice Fractions for iOS only. You must solve clever problems to help the Mammoth get his stolen hat back with the support of creatures that move, multiply and reveal hidden fractions.

The 100 puzzles are scattered throughout three worlds, starting easy and getting extremely challenging. Thankfully there's a reset button lets you retry your ideas over and over again. The underlying mathematical concepts in this app are solid, as is the pedagogy. But it's been done without reducing the pure joy of the problem solving. Content includes:

- Part-whole partitioning
- Numerator / Denominator notation
- Equivalent fractions
- Fraction multiplication
- Finding the common denominator
- Fractions bigger than 1

Apps like this one remind you of the potential of the touch screen medium for exploring challenging mathematical concepts, in a playful way. The content comes from UQAM. This is a paid app with no ads or IAP (in-app purchases).

Details: Ululab Inc., <http://ululab.com>. Price: \$3.99. Ages: 5-12. Platform: iPad, iPhone. Teaches/Purpose: logic, math, fractions, problem solving. Rating (1 to 5 stars): 5 stars. Entry date: 1/8/2018. []



Ease of Use	10	100%
Educational	10	
Entertaining	10	
Design Features	10	
Good Value	10	





TooTTooT Riddles

This is a collection of riddles like "When it's ripe, it falls from the tree." To enter your answer, you tap on the corresponding photo.

There are two modes: together or alone. In together mode, ask your child a riddle and let him/her find the answer. Alone Content includes 102 riddles about seasons of the year, 200 text riddles to share and eight stories. Requires reading.

Details: Jakub Mierzewski, . Price: \$2.99. Ages: 4-7. Platform: iPad, iPhone, Android. Teaches/Purpose: Language, reading, fun with language. Rating (1 to 5 stars): 3.7 stars. Entry date: 1/27/2018. []



Ease of Use	8	74%
Educational	8	
Entertaining	7	
Design Features	7	
Good Value	7	