



Playful Invention Company  
[www.playfulinvention.com](http://www.playfulinvention.com)

## **A PLAYFUL INVENTION KIT FOR KIDS**

### **PicoCricket Combines Art and Technology to Spark Creative Thinking**

Electronic toys and art supplies typically live on different aisles in the toy store. But now they come together in the PicoCricket Kit™, a new breed of construction kit that integrates art and technology to spark children's creative thinking. Based on research from the MIT Media Lab and developed with support from the LEGO® Company, the PicoCricket Kit enables children to create and program their own artistic inventions, such as musical sculptures, interactive jewelry, and dancing creatures.

“Kids can build on their interests in art and music, while learning important science and engineering ideas in the process,” says Mitchel Resnick, professor at the MIT Media Lab and co-founder of the Playful Invention Company (PICO), which produces the kit.

At the heart of the kit is a small programmable device, called the PicoCricket™, which fits in the palm of a child's hand. Children can plug lights, motors, sensors, and other electronic blocks into a PicoCricket, then program their creations to spin, light up, and play music. For example, a group of girls at an after-school center in Boston used PicoCricket and craft materials to create an interactive garden, with flowers that danced and changed colors when you clapped your hands. At a workshop in Hong Kong, a 12-year-old boy created a wearable jukebox that played different songs when you inserted different coins.

The PicoCricket Kit is based on more than a decade of research in the Lifelong Kindergarten group at the MIT Media Lab. The group previously collaborated with the LEGO Company on the development of the LEGO MINDSTORMS™ robotics kit, now used by millions of kids around the world to build and program their own robots. The PicoCricket grows out of this same tradition, but with greater emphasis on artistic expression. “The PicoCricket captures the LEGO spirit: it sparks the imagination, stimulates creative thinking, and engages children in playful learning,” says Kjeld Kirk Kristiansen, owner and vice chairman of the LEGO Company.

Activities for the PicoCricket have been developed and refined in collaboration with the Playful Invention and Exploration (PIE) Network of museums (with support from the National Science Foundation), and tested at Computer Clubhouse after-school centers (with support from the Intel Foundation). “In Cricket workshops, kids create things that respond to the world. That really excites them,” says Karen Wilkinson, project director at the Exploratorium in San Francisco. “And when kids create something themselves, they really understand it.”

The PicoCricket Kit is designed especially for ages 9 and up – but with help from a parent, younger children can enjoy Cricket activities too. The kit, which sells for \$250, includes PicoCricket, four sensors (light, sound, touch, and resistance), five output devices (motor, sound box, numeric display, and two multi-colored lights), easy-to-use PicoBlocks software for programming the Cricket, a “beamer” for transmitting programs to the Cricket, a collection of LEGO bricks, craft materials (including felt, pipe cleaners, and pom-poms), and illustrated project guides. It is available for purchase on [www.picocricket.com](http://www.picocricket.com)

For high-resolution PicoCricket photos, see [www.picocricket.com/press/photos/](http://www.picocricket.com/press/photos/)

*Related websites*

Playful Invention Company – [www.picocricket.com](http://www.picocricket.com)

Lifelong Kindergarten group – [llk.media.mit.edu](http://llk.media.mit.edu)

PIE Network – [www.pienetwork.org](http://www.pienetwork.org)

*For more information*

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