

The Ten Best STEM Toys of 2017

Have an older child who still loves playing with cars? Maybe it's time for an upgrade to a toy moon rover. Or your daughter really digs magnetic puzzles—she might like to try her hand at solving tougher logic problems. Honestly, maybe you just want an excuse to play with a funny little robot. But if you're feeling overwhelmed by the sheer number of science- or tech-themed toys out there, fear not. A team of testers and engineering educators at Purdue University has done some of the heavy lifting for you.

At Purdue University's [INSPIRE Research Institute for Pre-College Engineering](#), [Monica Cardella](#) and [Elizabeth Gajdzik](#) plucked 10 stand-out gifts from a suite of more than 130 toys either submitted by toymakers and publishers for evaluation or requested by the researchers. After rigorous testing by dozens of kids, parents, college students and engineers, the group compiles an annual [Engineering Gift Guide](#). When they're not testing toys for the guide, the institute's researchers study how children learn about engineering concepts inside and outside of school, with the goal of helping kids of all interest increase their interest in engineering-related disciplines.

The institute's researchers judge books, games, apps and toys not only on their fun factor, but also on how the products help develop "engineering thinking." With the U.S. Bureau of Labor Statistics predicting a [sharp increase](#) in jobs in science, technology, engineering and math (STEM) disciplines, there is a critical need to get the next generation of students and workers ready to step into those roles. Intangibles like creativity, perseverance, learning from failure, and evaluating the effectiveness of a solution are necessary skills for those jobs, not to mention valuable for life outside of them. Even very young children benefit.

"There are toys for kids as young as one and a half that let them put pieces down and see a different reaction or result," adds Gajdzik. "Little kids do realize those things happen, and make different choices the next time they play. That's an example of computational thinking that helps them become better problem solvers."

John Mendoza-Garcia, a recent Purdue doctoral graduate, was able to test out a variety of the lab's toys at home with his wife and 5-year-old daughter. Even though he's an engineering educator himself, he says the testing gave his family a deeper appreciation of the power of toys to shape valuable life skills.

"Engineering and science are disciplines that try to make people's lives better," Mendoza-Garcia says. "Toys like this help to shape that understanding. Plus, as someone who learns about how people learn, it was amazing how different that experience is when you play along with your kids."

SmartGames Snow White

Though "preschooler" and "logic" may seem like odd bedfellows, Gajdzik and Cardella say Smart Games' Snow White Deluxe puzzle game strikes the right balance between imaginative play and problem solving. With prompts from an illustrated story book and an instruction booklet with 48 challenges, kids employ logical reasoning and critical thinking to arrange the Seven Dwarves correctly to keep the Wicked Witch away from Snow White. And when they tire of the game, kids enjoy just playing with the set's sturdy figurines. (Smart Games, \$26.99)

