

## ***TeacherGeek Product Description Copy:***

### *Catch the Bug Activity:*

Ready to take your students on an awesome learning adventure? The Catch the Bug activity is a great way to deliver electrical concepts in a fun and exciting creative project. A complete learning process surrounds the construction of each Bug. Bugs wander the floor as if they're alive, sensing objects and finding their way around them. The best part? Students get to keep the finished product: a high-quality Bug with a big personality!

### **Do You Have the Bug?**

Check out one of our best sellers: the Catch the Bug activity. This super-popular project gives students the opportunity to learn about circuits, switches, resistance and more the best way possible: through the hands-on action of building their very own Bug! Our guided lab delivers electrical concepts through lighthearted examples and thought-provoking fill-in-the-blanks to get students thinking while creating their Bug.

Bugs are incredibly lifelike—set them down and watch them go! Smart enough to find their way around obstacles, Bugs provide endless entertainment while providing an unprecedented electronics learning experience.

A wonderful, end-to-end learning activity for ages 10 to 110, the Catch the Bug activity can be completed by following our engaging, [teacher-created lab](#), or you can build a Bug just for fun with our [easy activity instructions](#). All documents are available for free!

### *Crazy Contraptions:*

What can your students design and build? Find out with pulleys, cups, gears, linkages, cams, wood strips, screws, cars, chipboard, marbles, wire, and loads of other components that easily work and fit together. The possibilities are endless!

Don't be afraid to rob the recycling bin, take apart old toys, cut up some wood, or even visit a flea market. The Crazy Contraptions components are designed to be used with anything you can find to build anything you can dream. The more complex the better!

### *Basic Hydraulic Arm Activity:*

Learn about hydraulics/fluid mechanics while constructing a remotely operated hydraulic arm. Use the detailed sample arm instructions or design and construct your own. The arm pivots at two points and the gripper opens and closes.

Many teachers like to have their students build the stock hydraulic arm and then engineer changes to it. This method introduces students to the basic concepts and methods before they are asked to engineer beyond them. This is an Easy Engineering activity, making design, construction and revision simple.

Need more? Also available as a money-saving [10 pack](#).

### *Hydraulic Build Anything Pack:*

We mean it—anything! Design and build fluid-powered systems with the Hydraulic Build Anything Pack. The Easy Engineering components turn syringes into incredibly functional hydraulic/pneumatic cylinders and control panels. Dream it. Build it.

### **Be Inspired!**

The Hydraulic Build Anything Pack comes with enough components to let your imagination run wild. Inspire your students (or yourself!) to build something totally unique. Some possible challenges:

- Use as many of the components as possible
- Use as few of the components as possible
- Make as many creations as possible with what's included
- Build something, create step-by-step instructions to build it, then have someone else build their own following those instructions
- Create the most complicated machine possible
- Create the simplest machine possible

### *Hydraulic Pet Racer Activity:*

One of the greatest student design and engineering challenges out there: pet racers! Introducing students to pneumatics, hydraulics, design, engineering and materials processing has never been so much fun. From heads to tails and bodies to wheels, students come up with some of the most unique and innovative mechanisms for their pets.

### **Hydraulic Pet Racer**

The pet racer activity is based on the scenario of toy development for a large manufacturing company. Competitions explode with energy and excitement as students create and evolve their hydraulic pet racers. Push and pull hydraulic remotes to send pets scurrying with their tails wagging, heads bobbing and wings flapping.

So, what will your pet racer be? A horse? Caterpillar? Bird? Ant? It's your choice! See how different species hold up to each other in a race, or see how to improve upon the same design to make the ultimate racer. Extra parts included for varied and innovative designs.