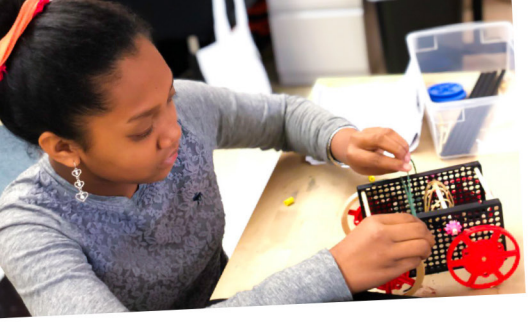
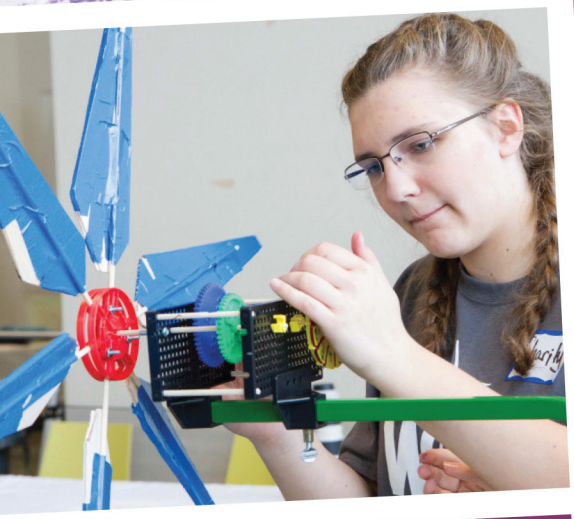




TeacherGeek

STEM STEAM MAKER CART MANUAL

THE Ultra Successful Super Amazing...

STEM/STEAM Maker Solution!!

Congratulations!

This cart is going to supply your kids/students with incredible experiences, unlike anything else they have ever done. We've tried to make getting started as easy as possible. Follow these few easy steps below and you'll be making projects in no time.

START WITH THE EMPTY CART FACING YOU.

TOOL SIDE (TO THE LEFT FACING THE CART)

BIN SIDE (TO THE RIGHT WHEN FACING THE CART)

Maker/STEM Cart Manual

1. Remove the bag of pegs and a stubby screwdriver from Box 1 and attach as shown below. The tool side is already assembled for you!

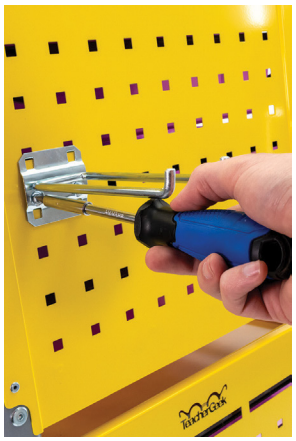
TOOL SIDE

5” 30 Degree Bend Rod

5-3/4” Double Rod

3” Single Rod

6” Single Rod



Please note: screws attach below the metal hooks.

Clear bins are found in the largest colored bins on the Maker Cart.

BIN SIDE

2. Remove the bag with the Sign Posts from the Cart. Slide the post into the black plastic mount. In the bag with the Sign Posts will be the mounting screws and an Allen wrench. Place the screws into the hole at the base and use the Allen wrench to tighten them.

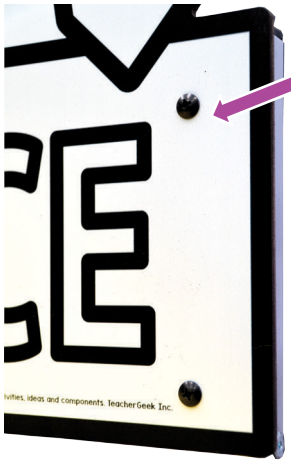
NOW ON TO STEP 3!

Maker/STEM Cart Manual

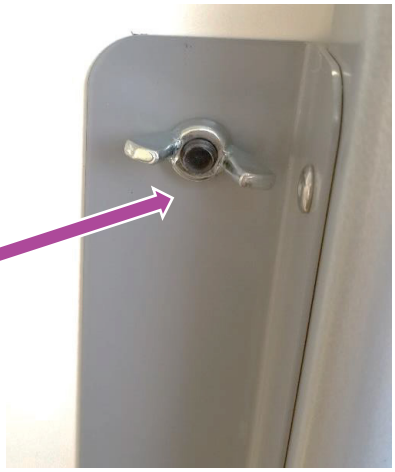
3. Remove the sign hardware from Box 1, there will be 4 black screws along with the 4 wing nuts. Hold the sign up and place all 4 screws through the holes in the sign and then through the holes in the Sign Posts. Take the wing nuts and screw them onto the screws. Now that your sign is attached, you can take the crayons provided and color the sign whatever colors you want!

Holes for mounting the sign to the cart.

Place the screws through the sign and Cart.



Tighten down the wing nuts to secure the sign.



The signs are dry-erase. Color and recolor as many times as you'd like with dry-erase markers or crayons. Dry Erase Bright Crayons are provided with your Maker Cart!

Maker/STEM Cart Manual

4. Now that your Maker Cart is assembled, fill up your bins with TeacherGeek components and you are ready to go! (You will have more components than will fit in the bins, save the extras to refill your Cart later.)

Be aware that that Bridge nuts and screws have their own bin and bags provided. (You can find them in Box 2.)

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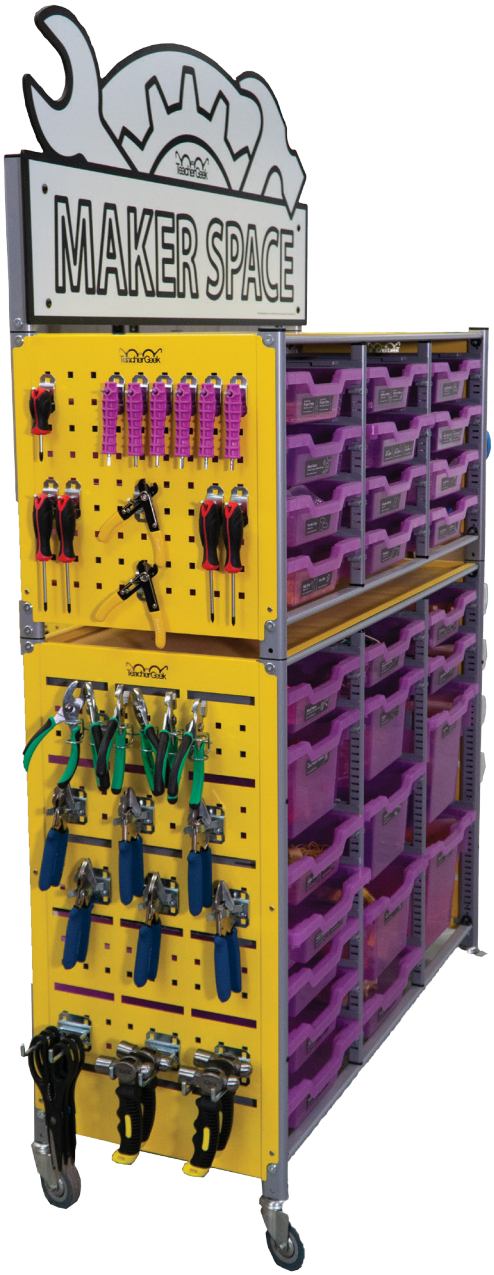


Tool Side
(Left Side when facing the Cart)

Fill pegs with tools for easy kid/student access as shown above.

Bin Side
(Right Side when facing the Cart)

Fill pegs with components as show: vinyl tubing, wire rolls, string, and tape. Hang bins and fill them with the parts provided.

All Done!

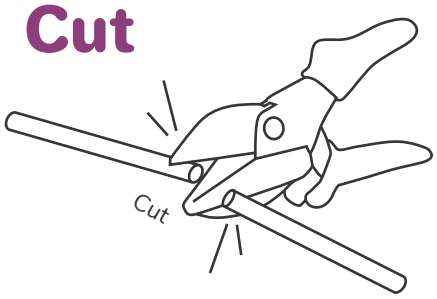
Your Maker Cart is fully assembled and ready to use!
Keep the extra components handy to refill your Cart.

Re-order supplies from **TeacherGeek.com**

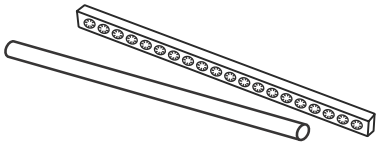
Maker/STEM Cart Manual

Build it, try it, change it. Design and engineer your most imaginative mechanisms with TeacherGeek™ components. Combine them with recyling bin and other materials.

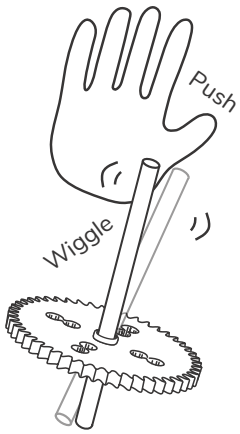
Cut



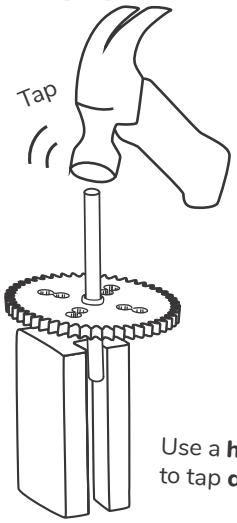
Multi-Cutters cut wood & plastic (like **dowels** and **connector strips**). They do not cut metal.



Push, Wiggle, Tap



Push, wiggle or tap **dowels** into holes.



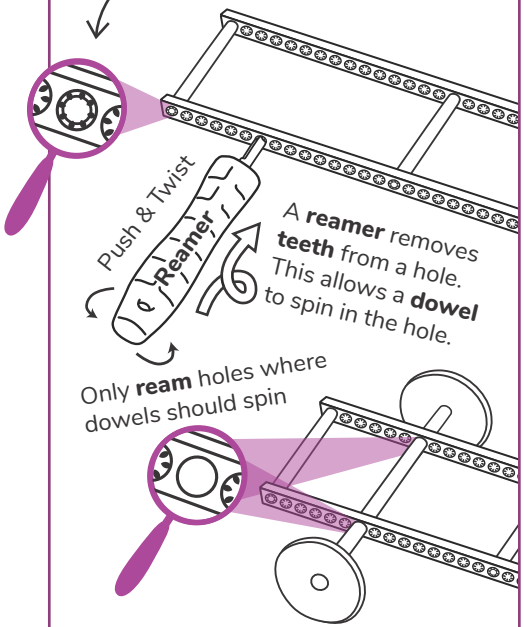
Use a **hammer** and **slider block** to tap **dowels** farther through holes.

Quick Tip!

Use a crayon or soap on the end of a Dowel to make building easier.

Ream

Most parts have holes with **teeth**. The **teeth** hold **dowels** (keep dowels from falling out).



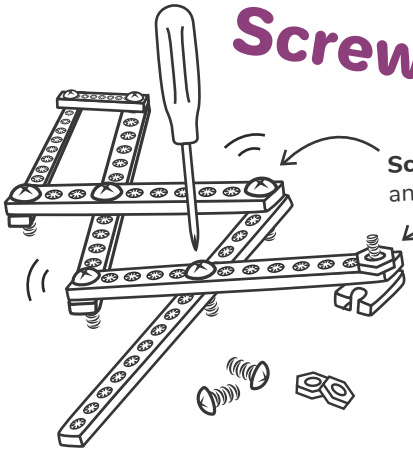
A **reamer** removes **teeth** from a hole. This allows a **dowel** to spin in the hole.

Only **ream** holes where dowels should spin

Never **ream pulleys, gears, wheels,** or any hole a **dowel** stays stuck into.

Screws & Nuts

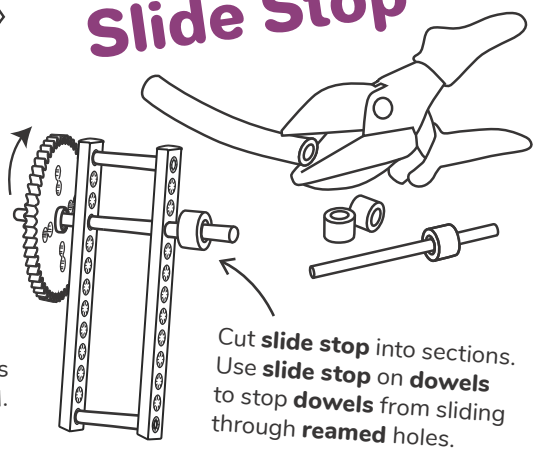
Do not **ream** holes you will put **screws** into.



Screws (without nuts) can connect parts, and allow them to rotate.

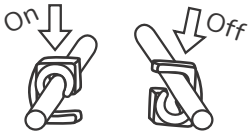
Screws (with a nut) can connect parts, and keep them from rotating.

Slide Stop



Cut **slide stop** into sections. Use **slide stop** on **dowels** to stop **dowels** from sliding through **reamed** holes.

Stop Clip



Press a **stop clip** onto a **dowel** to keep it from sliding or use it as a hook for a string / rubber band. It takes little force to get it on.

More resources available at teachergeek.com.

Adult supervision required for children 12 and under.

There's More?!

Given all of the awesome tools and components that come with the Maker Cart, it would be nearly impossible for us to include all of our academic content! Here's a quick breakdown of what we offer...

Go Guides

These nifty guides are designed to make it easy to start making with TeacherGeek. Graphically illustrated instructions help you complete your first build, and the inspiration page will help you engineer your next!

Lab Activities

Hammer home scientific and mathematical concepts all while having a blast! TeacherGeek's build quality means kids/students get to work with real data, understanding how their design changes affect their creation as well as the different concepts at play.

Engineering Challenges

Think your build is the best? Prove it! Our challenges are sure to stir up some friendly competition and have you racing to improve your design in order to be the very best. Some challenges even feature exciting scenarios that'll get everyone fired up!

Lab Answer Key Passwords
"Catch the Bug": *B18-CH39*
Other Passwords: *Pascal7*

We're always evolving, updating, and adding new content!
Check **TeacherGeek.com/Learn** regularly so you don't miss out!

Maker/STEM Cart Manual

Videos

Want some TeacherGeek on the big screen? Many of our documents are available online in video form! Build along with us, get the rundown on a lab, or get amped up for a new challenge!

Our videos are high-energy, super engaging, and always bursting at the seams with very high quality humor.

Searchable

TeacherGeek's activities are standards-aligned (NGSS, Common Core, & ITEEA) to help revolutionize the way you plan lessons. Want help teaching a specific topic? Looking for activities for a certain age range? Want to make without the tools? The activity filter at TeacherGeek.com makes it simple to find the perfect activity for anyone and everyone.

Customizable

TeacherGeek's activity documents are downloadable directly from our website in both PDF and .docx formats, meaning they can be custom-tailored to meet your specific educational needs.

Support

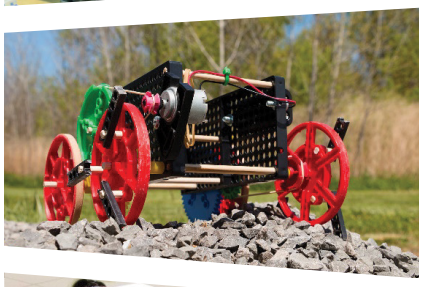
TeacherGeek's curriculum development team is made up of real teachers that are more than happy to help you get the most out of your TeacherGeek experience.

Give us a call at 888-433-5345 or email us at sales@teachergeek.com!

Maker/STEM Cart Manual

The Maker Cart + TeacherGeek Curricula → The ULTIMATE Solution!

It's Okay to Show Off!
We'd love to see any pictures and videos of what you've created with your TeacherGeek Maker Cart. Your submissions may even be featured in future TeacherGeek documents!



Re-Ordering Supplies

Re-order super awesome bulk TeacherGeek components to refill your Cart for even more making and tinkering fun! Want to plan for specific TeacherGeek activities? Use our re-ordering spreadsheet to help calculate what supplies you'll need (available at: TeacherGeek.com/Maker). If you need any assistance, give us a call!

Warnings

Educational product, not a toy. CAUTION: Adult supervision required for children under 13.

Components:

Caution: Choking hazard. Small parts. Keep this bag away from babies and children. Not intended for children under 5 years. Not a toy. Educational product. Made by TeacherGeek Inc. in NY USA 888-433-5345 sales@teachergeek.com

Tools:

Caution: Cut hazard: Product has functional sharp edges. Contact may result in injury. Always keep blades away from fingers and body. Handle with care. Use with adult supervision. Wear safety glasses when using. Not intended for ages 12 and under. Warning: Choking hazard. Keep plastic bag away from babies and children.

Components Included

You can find a list of all of the standard Maker Cart Components online at TeacherGeek.com/Maker.