

## Learning STEAM concepts through MAKING

Kids and adults make things all the time. We make food in the kitchen. We create games. Kids

build forts. Adults tinker with tools and create for the home.

Making is a motivating, authentic way to learn STEAM concepts. Making could be:

Fixing a zipper on an old jacket and customizing it with patches.

Taking a too-small favorite shirt and finding a way to still wear the image

Building a robot

Designing balloon-powered car

Building with legos

A great way to start making is to look around your home and find something that you still love,

but can't use anymore for some reason.

Use design thinking to make that item useful again.

Ask:

What is the problem?

How could I solve this problem? – try to brainstorm as many solutions as you can! No

idea is a bad idea at this point.

What solution best solves the problem?

What materials do I already have?

What materials might I need?

Are there directions on how to do this project anywhere? – it probably is a good idea to start looking into how other people solve this problem! Have an adult help you if the

search is tricky.

What safety rules do I need to know or follow to make my project a success?

Then, start researching and gathering materials. Maybe even practice whatever you are going

to do before trying it out on your favorite thing. Watch You-Tube videos and check out project

websites. Make a comprehensive materials list and figure out what store sells what you need.

Ask for help to get required materials if necessary. Once you get your materials, decide if it

would be a good idea to try what you want to do on a practice item first. The first attempt isn't

always perfect. Sometimes what matters most is that we try and try again.

Good luck!

Submitted by SpaceLab, a non-profit makerspace in Mokena

<http://spacelab1.com/>