

Welcome Engineers! In these activities, you will use materials you have around you to build, design, and create a variety of things. Because we will each be making our own designs, we want to try to have materials and tools nearby.

## Let's go on a Materials and Tools Scavenger Hunt!

First, what container can you turn into a special storage space to hold your building materials and tools? A bag? Box? Backpack? An area on a desk?

Now you're ready to go searching! You can start by thinking about materials with lots of possible functions. What are some strong or sturdy materials? What could hold things together?

A few examples of material categories are below, but they're certainly not your only options!

- **Connectors:** tape, glue, glue stick, rubber band, clip, string, shoelace
- **Flexible** things: aluminum foil, string, coffee filters, fabric, old T-shirt, paper
- **Soft** things: cotton ball, pillow, stuffed animal, sponge, fabric
- **Floating** things: bark, wood, tongue depressor, cardboard tubes (toilet paper or paper towel rolls), egg cartons
- **Strong** things: book, cup, spoon, bowl, sticks

### Scavenger Hunt Tips:

You may want to use materials that don't belong to you or that belong somewhere other than your special storage space, like books or kitchen tools (fork, spoon, chopsticks, bowl). Let's leave these where they are until you're ready to start our workshop. Then, you can ask a grownup to help you put them back when you're finished.

It's not about how many materials you can find, but how you can use them to build in different ways!

Questions to keep you thinking:

*How else could you categorize your materials? Things that make sound?*

*What are you excited to learn more about?*

*What material do you predict you will find most helpful in your design?*

# Materials Scavenger Hunt

Collect materials that will help you make your prototype. Below are some examples of materials we found and collected for our design. We are curious to see what you will find and add to your bag!

Things that are strong



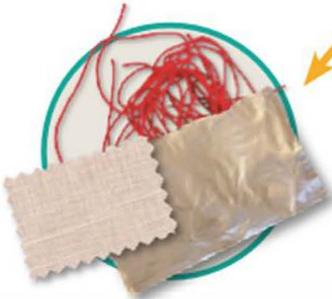
Things that can float



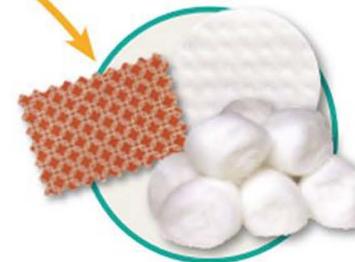
Things that can connect



Things that are flexible



Things that are soft



Bay Area  
Discovery  
Museum