INTRODUCTION
What do Elmo, Baby Yoda, and Kermit the Frog all have in common? They are all puppets! Puppets are moveable models controlled by a person using strings, wires, hands, or even technology. Puppets can be modeled after people, animals, or creatures that are make believe. Puppets are a widespread form of theater and storytelling with varieties and styles across the world, some human-operated while others are not, some small as buttons while others stand as tall as buildings. Puppets are both objects of engineering and objects of beauty.

In this activity we will be exploring character and character design by making puppets! As designers we will have to make choices and use design thinking to construct our puppets. Who will our character be? How will they move? What story are they telling? How does this character reflect us and our identities?

IN THIS ACTIVITY YOU WILL:
- Design a character
- Make a puppet

Tools & Materials of Making
Get creative and use whatever materials you have available.
Here are some suggestions to start with:
- Paper, we recommend cardstock or cereal box cardboard since they’re sturdy
- Brass Fasteners or Pipe Cleaner
- Hole Puncher
- Connection materials: tape, glue, putty, binder clips, paper clips, etc.
- Optional Embellishing materials: glitter, stickers, drawings
- Tools: Scissors, Pens, Pencils, Markers, Paper

BRAINSTORM AND CHOOSE YOUR CHARACTER
There is character, and then there is movement. Think of a character you’d like to make and then to think about how you’d like them to move. The character can be one you already know of like from a book or TV, a character you make up from your imagination, or your character can be you! Running or walking, bowing, reaching for the sky, and sitting are just some options. If your character is a person or something like a person, you can also act out their movement with your own body. This might give you a sense of how your design will need to look.

SKETCH YOUR CHARACTER DESIGN
Start by sketching your character as a stick figure

DRAW YOUR CHARACTER
1. Use your stick figure sketch to create a bubble drawing of your character.
2. Cut your pieces out! **HINT:** Make sure to give yourself enough room between limbs so that you can comfortably cut them out too.
3. Once the pieces of your puppet have been cut out, you’ll need to create holes to re-attach them together using the brass fasteners. Using a pencil to first draw dots where the holes will go is one way to prepare them. If you don’t have a hole punch, be very careful or seek help with using scissors to pierce holes into each of the pieces.

ASSEMBLE YOUR CHARACTER
We like using brass fasteners to put the pieces of our puppets back together into one. **HINT:** If you don’t have them, get creative! We’ve found pipe cleaners, bendable wire, even other strips of paper can do the job!

ANIMATE
With your puppet fused back together, you can play and extend your thinking in a whole variety of ways.

Extension Ideas
Puppets reward iteration and expansion. Multiple sets of limbs or parts can be designed and made to allow an even larger variety of movements; speech bubbles can lend to storytelling; clothing or accessories can be designed and made that bring personalization to new heights.

Puppets can be used to make ornaments; to create interactive cards or books by adding things like pulleys, levers, etc, to a page; to make stop-motion animations with the aid of an app and smart device.
What will you make next?

Extra Credit!
Check out our video lesson on stop motion animation and turn your puppet into the star of the show!

Pro-tip:
Did you make a ‘mistake’ on your first go with your puppet design?
You can use it for additional limbs!

Pro-Tip:
If you have excess paper on your sheet after cutting out your puppet pieces, you can use them to design additional pieces for whole varieties of movements and looks, or deck out your puppet with accessories. Speech bubbles, clothing, backdrops, the sky is the limit!

Created in collaboration with: Aáron Heard & Jake Montano
For more resources, visit us: makered.org

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