



MAKER ED

LEARNING IN THE MAKING: Sewing Stuffed Creatures

INTRODUCTION

Do you have mismatched socks lying around? Don't throw them out! Sew them into a stuffed creature of your very own. Stuffed animals can provide a source of comfort in times of stress, reducing loneliness and anxiety. In fact, cuddling anything soft and comforting releases hormones that calm and soothe us - no wonder over 40% of adults sleep with a stuffed animal!

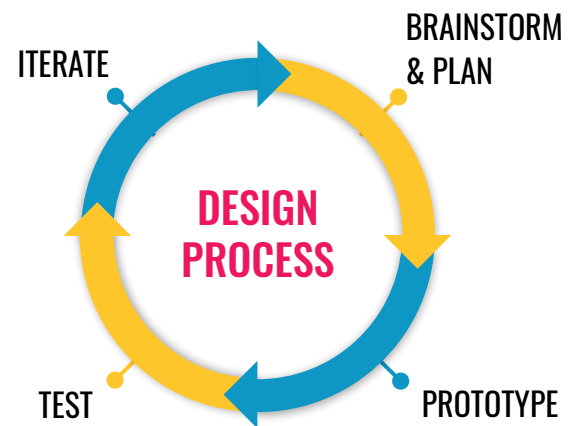
But how do you turn a square of fabric or an old sock into a cute stuffed animal? Using the design process! First, you'll brainstorm ideas and sketch a plan. Next, you'll create your design. Once you've made the first prototype, you'll probably find things you want to modify. Iterate on your design to make it better!



YOUR CHALLENGE

Use the design process to design a stuffed creature that has the following criteria:

- Is made out of fabric
- Has a head and body with at least one appendage (like an arm, leg, tail, or wing)
- Is decorated to give it some personality



Subject

Design



Standards

NGSS: 3-5-ETS1-1

Engineering Design. Define a simple design problem reflecting a need or a want that includes specified criteria for success.



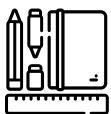
Grades

3-5th
6-8th
9-12th



Key Terms

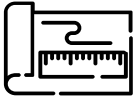
- Criteria
- Prototype
- Iterate
- Sew



Tools & Materials of Making

This maker activity can be done with a wide variety of materials. Below are some suggestions to start with - be creative with whatever you have at home!

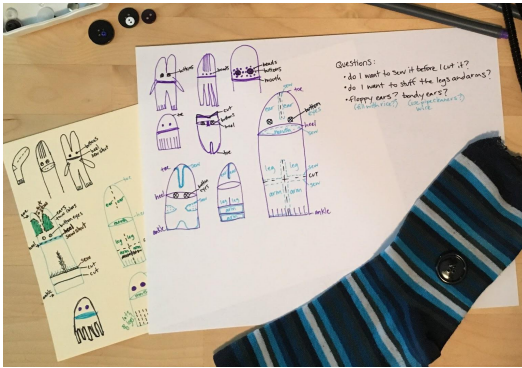
- **Planning supplies:** paper, pencil, markers, crayons
- **Base material:** fabric - use old socks or other worn out clothing
- **Tools:** scissors, needle and thread, hot glue gun and glue sticks
- **Stuffing:** fiber fill, paper, fabric
- **Decorations:** buttons, beads, googly eyes, fabric, yarn, markers, paint, pom poms



ACTIVITY INSTRUCTIONS

BRAINSTORM & PLAN

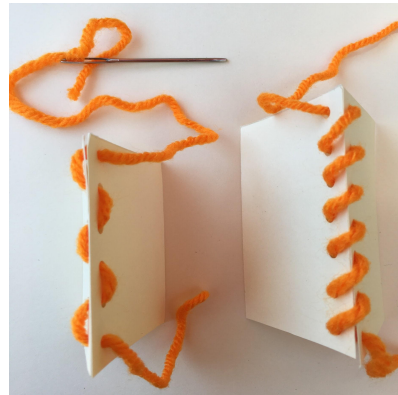
Come up with as many ideas as you can! Look over all the materials you have available and think about how you can use them in your design. Choose one idea that best fits the design **criteria**. Sketch your idea on a piece of paper and label the materials that you will use.



- Does your creature have legs? Wings? How will you make those shapes?
- Are you including eyes? What will you use to make them? Buttons? Fabric?

PROTOTYPE

Create a **prototype** of the creature you designed! You can prototype different parts of your creature then sew them all together. For example, you might start with two big legs but then decide to make them thinner or shorter or make five of them!



Examples of sewing techniques



Original Image by The Bunny Maker

TEST

When cutting and sewing your creature, you might find things that didn't quite work the way you wanted. Record your observations:

- What worked well in your design?
- What do you want to change?



ITERATE

Based on your observations, adjust your design to brainstorm, plan, build, and test a new prototype!

- What new ideas do you want to try?

Reflect After you complete the challenge, reflect on your experience:



- What problems did you have in your design and how did you use your creativity to solve them?



Criteria are things the design needs to have to be successful.



When you **sew**, you bind two pieces of fabric together with needle and thread, kind of like glue!



Sewing Tip: Big stitches are quick but can come apart. Tight stitches can pull fabric together. Experiment to find what works for your design.



Sewing Tip: If you turn your sock inside out before sewing it together, you won't see the stitches.



A **prototype** is a first test of your design.



To **iterate** is to repeat the process again.



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#SockCreature



Watch this activity video here:
bit.ly/MakerEdSewing



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