

# FREE DRAPING With Fabrics

Leader Guide



*Fashion*  
through science

## WITH THIS ACTIVITY

- NONE!

## MODULE



We are  
Engineers!



Movement  
Improvement



Marvelous  
Materials



Smart  
Clothing



Patternmaking  
Tools n' Tech

## Big Picture

Young designers create unique designs by turning 2D fabric into their own 3D draped garment on a half-scale dress form.

## What's the goal?

Designers experiment with ways to shape 2D fabrics onto a 3D dress form. They observe how fabric shape, weight, structure and texture dictate garment patternmaking and construction techniques and influence the look of a garment.

## Preparation

- Obtain or assemble half-scale dress forms (see *Tips* above).
- Pre-cut fabric into squares (22" x 22"), circles (22" diameters), and/or rectangles (12" x 36"- 45"). You may use any fabric, but it is more interesting if you provide variety.
- Collect as many interesting fabrics as possible for the final draping in Step 7.

## Materials

### What they need: (per person or team)

- Half-scale dress form
- Fabric pieces cut as 22" squares, 22" circles, and rectangles 12" x 36"-45"
- Scissors
- Pins
- Access to a collection of many pieces of fabric that include a variety of weights, fiber contents, drape qualities, colors, textures and patterns

**Preparation Time: 30 Minutes**

**Activity Time: 30-90 Minutes**

**Difficulty: Level 4**

## Grouping

Pairs are ideal, but individuals, and also teams of no more than four also work.



# Let's get started!

1. Decide on groupings and make certain that each team has a half-scale dress form, pins and a set of pre-cut fabrics.
2. Demonstrate how to insert pins at an angle (instead of pushing the pins straight into the dress form), and remind young designers to be careful with the sharp points.
3. Allow 5 minutes for the teams to create a garment by pinning the square fabric to the dress form. **NO CUTTING ALLOWED!**

- **Discussion point:** Compare the different designs and discuss what shaping techniques were used and why some fabrics were more challenging than others.

4. Repeat Step 3 with the circle fabric.

- **Discussion point:** Compare the different designs and discuss what shaping techniques were used and why some fabrics were more challenging than others.

5. Repeat Step 3 with rectangle fabric.

- **Discussion point:** Compare the different designs and discuss what shaping techniques were used and why some fabrics were more challenging than others.

6. Ask the teams to select their favorite shape or fabric and create a new design **USING SCISSORS**.

- **Discussion point:** Compare this design process and results with the previous design made from the same shape or fabric without cutting.

7. Allow 30 minutes for the designers to select any fabric(s) they like and create a garment from their own imagination. **SCISSORS ARE ALLOWED BUT NOT REQUIRED.**

## Tips

- Half-scale dress forms are expensive to purchase. One solution is to make your own (see Making a Half-Scale Dress Form). You may borrow from a college in your area, or watch for online bargains. You can find websites with instructions for making half-scale forms from plaster, duct tape, or paper mâché.
- This activity is an excellent way to reinforce the understanding of skirt shapes (see the Spectacular Skirts activity) and construction techniques such as darts, pleats, and gathers.
- This activity can be easily modified to fit the time you have. As written, each young designer (or team) creates five designs. You can streamline the process by reducing the number of choices in fabrics and fabric shapes. You can also skip Step 6 or simply begin with Step 7.

## VOCABULARY

**Dart:** A fold that is tapered and stitched, creating shape

**Pleat:** fabric is folded and stitched in place at the top or along the fold

**Gather:** the fabric is pulled together on a line of stitching and sewn, scrunching it together

## Wrap it Up

Ask each team to share their final creation:

- Explain the design idea, how the garment might be used, who would wear it, fabric choice, and shaping techniques.
- How will the wearer don and doff the garment?
  - The fabric is stretchy so the wearer can pull the garment on like a t-shirt.
  - Create openings with buttons, zippers, ties or other closures.
  - Wrap the garment and hold in place with a belt.

### VOCABULARY

**Don and doff:** to put on (don) and take off (doff) a garment.

## Ideas to take this further:

1. Fabric will hold its shape better if it is draped on the grain. Try marking the grain line on the fabric and then draping the fabric onto the dress form while maintaining a vertical grain line.

### VOCABULARY

**Grain line:** The direction that the fabric is woven or knitted. The lengthwise grain runs from end to end of the fabric. The crosswise grain runs from side to side (selvage to selvage).

2. Use draping as a way to explore upcycling of used clothing. Young designers are given a shirt or blouse that is photographed and weighed (a garment for a small girl or child is ideal). They deconstruct (cut apart) the shirt and design a new garment on the half-scale dress form using as many pieces of the shirt as possible. Photograph the upcycled garment and weigh the unused fabric. Compare their designs and percent waste

### VOCABULARY

**Upcycle:** refashion materials to create a product of equal or higher quality/value than the original.