



*Learning, Leading, Living*

# Terrific Tie Dye

## Mission Mandate/Project

### Connection:

Science and Technology

### Topic:

Tie Dye Fabric

### Life Skills:

Planning and Organizing

### Audience:

4-H youth, all ages

### Length:

20 minutes

### Materials Needed:

- Tie Dye dyes
- Squeeze bottles and/or one gallon milk jugs for each color of dye
- Disposable gloves
- Plastic table cloth or large plastic trash bags to protect surface from the dye
- Rubber bands
- White T-shirts
- One gallon zip-lock freezer bags.

### For more designs visit:

[www.ilovetocreate.com](http://www.ilovetocreate.com)

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## BACKGROUND

Tie dyeing is the process of folding fabric, tying it with string or rubber bands, and dyeing it to achieve different patterns. The folds and ties prevent the fabric from being uniformly dyed, and that is what creates the patterns. One or multiple colors of dye can be used. The dyes used are soluble in water, but they form a chemical bond with certain types of fabric like cotton (100% cotton is best for tie dyeing). The chemical bonds that are formed between the fiber and the dye are very strong, and that is what keeps the dye from washing out of the fabric.



We will be learning how to create three different tie dye patterns in this lesson: bull's-eye, kaleidoscope, and swirl.

## WHAT TO DO:

Before the meeting make the dye according to the directions. For large clubs, make the dye in gallon jugs for refilling the squeeze bottles. Have each 4-H'er bring a white T-shirt to the meeting. The T-shirt should be washed and dried without fabric softener prior to dyeing. Have youth decide which pattern they would like to make. Give each youth 5-10 rubber bands and a pair of disposable gloves. Follow the directions below for folding, tying and dyeing the T-shirt.

### ***Bull's-eye***

To create the bull's-eye pattern, first decide where you want the center of the bull's-eye on the T-shirt. Pinch the fabric at that point and pull up forming a tube shape. Start about one inch from the end and bind the T-shirt tightly with rubber bands every two to three inches. Using a squeeze bottle, apply dye between the rubber banded sections. When finished dyeing, place the T-shirt in a plastic bag for at least 4-6 hours. Rinse in cool water until the water runs clear; wash and dry separately using hot water and a little laundry soap. Use the large load setting.



### ***Kaleidoscope***

For the kaleidoscope pattern, horizontally pleat or fan-fold the T-shirt into one to two inch folds. Place multiple rubber bands along the length of the folded T-shirt (about every one to two inches). Using a squeeze bottle, apply the dye to the folded edge of the T-shirt. Turn T-shirt over and repeat on the opposite side. When finished dyeing, place the T-shirt in a plastic bag for at least 4-6 hours. Rinse in cool water until the water runs clear; wash and dry separately using hot water and a little laundry soap. Use the large load setting.



### ***Swirl***

Decide where you want the spiral on the T-shirt. Pinch the fabric at that point and twist in a circle to form a flat spiral. Bind the spiral with three rubber bands that cross each other and form six equal pie pieces. Using a squeeze bottle, apply the dye to each wedge of the T-shirt. Use one color and dye each pie piece or dye each pie alternate colors. Make sure you dye each side. When finished dyeing, place the T-shirt in a plastic bag for at least 4-6 hours. Rinse in cool water until the water runs clear; wash and dry separately using hot water and a little laundry soap. Use the large load setting.



**ENCOURAGING YOUTH LEADERSHIP:** Have older youth make T-shirts in advance to have examples of the T-shirts to show the 4-H'ers. Have older youth demonstrate the tying and dyeing techniques.

### **TALK IT OVER:**

#### *Reflect:*

- What was difficult about this project? What was easy?
- Did the shirt come out exactly like you thought it would? Why or why not?
- What role did planning play for you in your t-shirt design?

#### *Apply:*

- What some things you might have considered before you started the dyeing process?
- How might those ideas have changed the final result?
- What is an example of something that you do regularly that might benefit from additional planning?

### **ENHANCE OR SIMPLIFY**

- If you have a large club, you may want to make the dye by the gallon and have multiple squeeze bottles for each color.



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