

# HOW TO MAKE FELT

In the Hats, Boots, and Chaps section of the 4-H Western Heritage Project resource book, you learned that a majority of hats worn in the 1800's were made of felt. Felt is a fabric that consists of pressed or matted interlocking fibers of wool or the under hair of beaver, rabbit, muskrat, and nutria. Unlike woven cloth, felt will not unravel after being cut due to these interlocking fibers. Archeologists discovered felted items in the tombs of nomadic horsemen dating back to the Bronze Age. Today, felting wool can be purchased at your local craft or hobby store as a roving or batt with natural or synthetic options available. The instructions below will walk you through the process of making felt step by step. These instructions are based on production of a 12in. x 8in. piece of felt made from wool fibers that came in a roving.

*Note: roving wool fibers are combed and batt wool fibers are carded. Combing wool is freeing fibers of debris while detangling and orienting all the fibers in one direction; carding wool is freeing fibers of debris and detangling the fibers without specifying a fiber direction.*

## What You Will Need

- Wool fibers (either batt or roving)
  - Tip: around 2 ounces of wool will make a piece of felt spanning 5x3 inches
- A water pitcher or jug
- Liquid hand soap
- Hot water
- Cooking pan - i.e. cookie sheet
- Bubble wrap
- Rubber Gloves (optional if your hands are sensitive to hot water)



## Step 1

Start the process by pulling small strips or scales from the roving. To do this, locate the end of your roving and grasp a pinch of wool fiber between your thumb, pointer finger, and middle finger. To separate your selected fiber from the roving, gently pull your fibers away from the roving. This should result in a small tuft or strip of wool fibers (See figure 1). *Note: do not cut your wool fibers, cutting will leave jagged or hard edges making the wool harder to felt.*



**Figure 1**

## Step 2

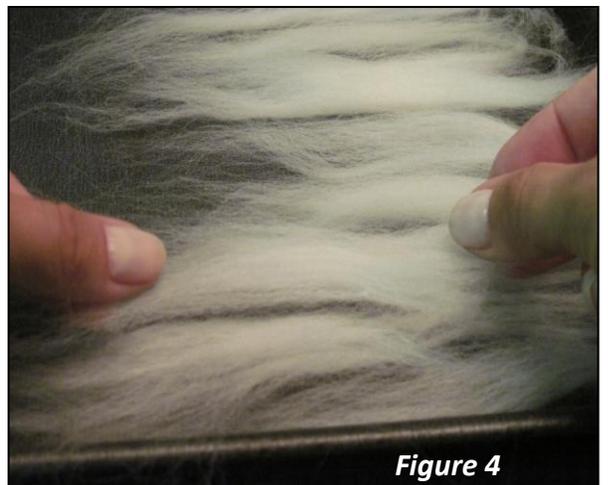
Gently tease your fiber strip or tuft with your fingers to even out the wool fibers (see figure 2).

*Note: you want your wool fibers to be as evenly distributed as possible.* Repeat steps 1 and 2 for the rest of your tufts or strips.



## Step 3

Now place your fiber strip or tuft on your cookie sheet so that it is lying left to right (see figure 3). Each new tuft or strip should be placed side by side and end to end while overlapping a little bit looking similar to scales on fish (see figure 4). *Note: when starting a layer of wool fiber, make sure to start placing your tufts or strips on one side and working your way across.* Once you have covered the cookie sheet with your first layer it is time to start the second layer.



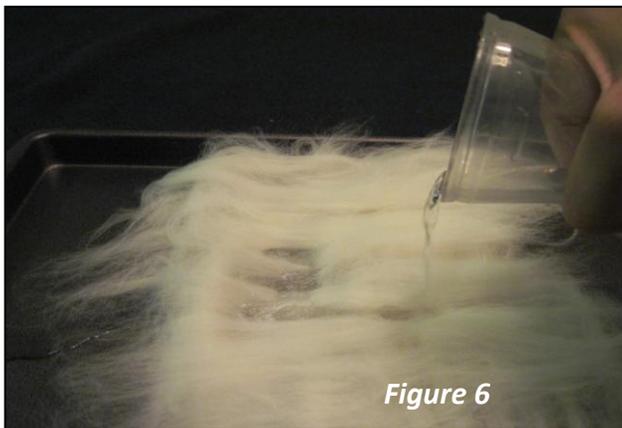
## Step 4

Repeating the steps you used for the first layer, place a second layer perpendicularly over the first (see figure 5). Note: if your first layer is pointing left and right make the next layer point up and down or vice versa. Each new layer that you add to your felt should be laid out so that the new layers' fibers are pointing perpendicular to the layer beneath it, i.e. left and right or up and down, than the previous layer. The more layers you make the thicker your felt cloth will be. Repeat steps 1 thru 4 until your felt is at least 4 layers thick



## Step 5

For this next step you will want to move your wool filled cookie sheet to a location that you don't mind getting wet i.e. kitchen sink, bath tub or even outside. Using a water pitcher, mix a little (about 1 ½ table spoons) liquid hand soap with hot water. Slowly pour the hot soapy water over the top of your wool layers then push the wool layers down with your hands (see figures 6, 7, and 8). Continue to press down the wool fibers over the entire area of your cloth; as the water cools add new hot soapy water to your cookie pan. After a while the fibers will begin to matt together and will soon be strong enough for you to lift your felt from the cookie pan without separating.



## Step 6

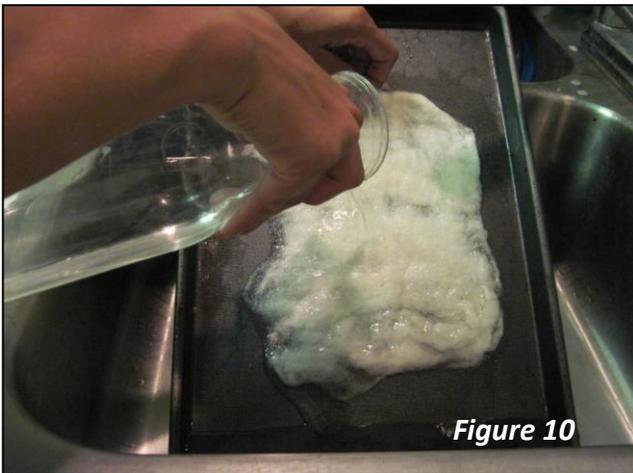
Now that your felt is matted together strong enough for you to lift it, place your felt on the bubble wrap. The bubble wrap will help speed up the process known as fulling. During this process you will rub your felt over the bumpy surface to help shape and firm your felt cloth (see figure 9). This process is going to take a little effort but keep working your felt until it has reached your desired firmness.



*Figure 9*

## Step 7

Gently rinse your felt cloth in cool water and squeeze the water from it (see figures 10 and 11). Note: do not wring the water out of your felt! It could damage your work. Continue to rinse until you have removed all the soap from your felt. Then pat the felt cloth down with a dry towel. Now that your felt is damp lay it out to air dry. After the felt cloth is dry you can cut and shape it (see figure 12).



*Figure 10*



*Figure 11*



*Figure 12*