

# Spinning and Weaving Station

## Materials Needed: (\*Provided by Park)

- \*Drop Spindles
- \*Cards
- \*Wool

Scissors (the class needs to provide these)



## Station Set-up:

1. The cards and spindles will be set up on a table in the courtyard.
2. A basket of wool will be provided next to the table.
3. Each student should have a pair of cards that are free of wool.
4. Each student should have a drop spindle that is prepared.
5. To prepare a drop spindle, tie a piece of yarn about two feet long to the base of the drop spindle above the platform.

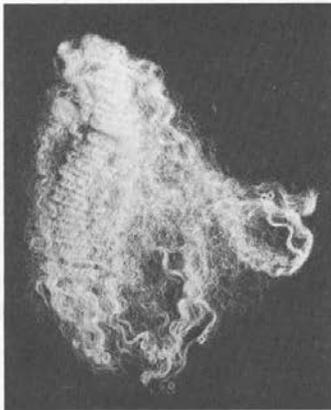
## Station

1. The students should each take a hand full of wool from the basket.

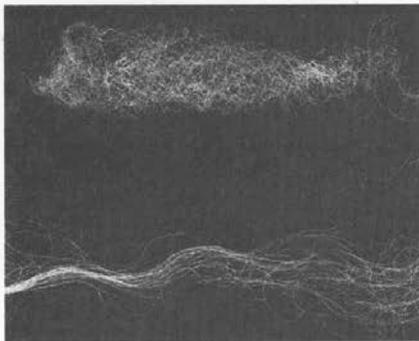
2. They need to separate the wool until it is very thin. (It should look similar to a cobweb.)
3. Once this is completed and the wool is free of leaves and debris, then it is time to start carding.

### **Carding\***

1. Hook a handful of wool on the teeth of one carder.
2. Place the other carder on top of the first, with the handles facing opposite directions and the teeth together.
3. Pull the carders against each other until the wool fibers are parallel to each other. It is very important to remind the students that this is a GENTLE job, not to grind the teeth of the carders.
4. If noils (nubs of short fibers) appear, transfer the wool the other carder by reversing the direction of the carding (bring the handles toward each other.) Continue carding as in step 3.
5. To remove the wool, pull carders against each other with the handles in the same direction.
6. Roll the wool into long rolls (called rolags) for spinning.



Wool fibers possessing a high amount of crimp



(Top) Down wool of short staple length.  
(Bottom) Longwool, long staple length.

#### PREPARATION OF FIBERS FOR SPINNING

A fleece which has not been washed is termed "in the grease," because it possesses a certain amount of lanolin. It has an oily feel and a characteristic odor. If the wool is top quality and quite clean, raw fleece can be spun "in the grease" (that is, without washing or scouring it first); it will yield a yarn with water-repellent qualities. The wool must be teased and carded for spinning.

If you purchase a fleece that is dirty, it must be sorted, washed, and carded (see *Cleaning*, below).

In addition to unwashed fleece, many suppliers sell wool that has been commercially scoured. Often it is sold in roving form (a long, combed, ropelike arrangement of fibers). Roving does not have to be washed or cleaned at home and is ready for spinning. However, since the scouring process removes all the natural lanolin, you will want to spray the wool with olive oil, or perhaps dip your fingers into a bowl of oil while you are spinning.

**Cleaning.** A whole fleece (sheared from the sheep in one piece) is usually tied together. Untie it and spread it out. Sort the wool according to the chart on page 13. If you can't tell which part of the sheep is which, or if you bought only part of a fleece, sort the wool according to coarseness, crimp, and color. Discard wool that is extremely matted or that is dirty with manure.

Wash the wool, approximately a half pound at a time, in a lukewarm bath of mild soap flakes and water until it is free of dirt.

Rinse the wool thoroughly in lukewarm water. Do not expose the wool to sudden temperature changes, as this weakens the fiber structure. Dry it in the shade; direct sunlight also weakens wool. Do not store unwashed wool which is extremely dirty for a long period of time. Wash, dry, and store it in an open-mesh bag. Add mothballs to the storage bag if you intend to store it for some time. (Wool is an organic fiber and may deteriorate if you do not care for it properly.)

Wool may also be washed in an automatic washing machine. Use the gentle cycle with cold to lukewarm water, and a cold-water woolen wash or a cold-water detergent as the cleansing agent. Adding a fabric softener to the final rinse will make the wool especially soft. Do not use the regular cycle of the automatic washing machine! It will cause the wool to mat horribly and almost spin into yarn.

**Teasing.** After the wool has dried, pull and tear it apart with your fingers. This helps to untangle the fibers and also allows

From Step by Step Spinning and Weaving by Eunice Svinicki

any hay chaff to fall out. It would be wise to place a newspaper on your lap to catch the fallout.

Carding further cleans the wool and lines it up in one direction. A pair of carders is essential (see page 11). Place a newspaper on your lap to catch foreign matter.

**Step-by-Step Carding of Wool**

1. Place a handful of wool on the teeth of one carder.
2. Place the other carder on top of the first, with the handles facing in opposite directions and the teeth together.
3. Pull the carders against each other until the wool fibers are parallel to each other.
4. If noils (nubs of short fibers) appear, transfer the wool to the other carder by reversing the direction of the carding (bring handles toward each other). Continue carding as in step 3.
5. To remove wool, pull carders against each other with the handles in the same direction.
6. Roll the wool into long rolls (called rolags) for spinning.



**Teasing.** Pull the fibers apart with your fingers.

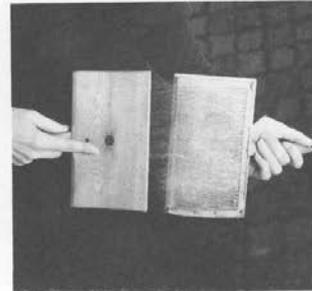
**Carding**



1. Place wool on one carder.



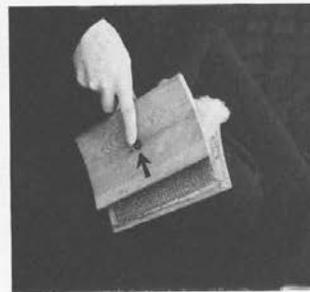
2. Place the other carder on top of the first.



3. Pull carders against each other.



4. Reverse direction of carding for persistent noils; continue carding.



5. Bring handles together to roll off the wool.



6. Roll carded wool into a rolag.

From Step by Step Spinning and Dyeing by Eunice Svinicki

## **Spinning\***

1. Tie a 24-inch piece of yarn to the spindle shaft just above the whorl (the round base made of wood).
2. Wrap the yarn around the shaft a few times. Bring the yarn over the edge of the whorl and wind it around the bottom of the spindle shaft just below the whorl.
3. Bring the yarn up to the top of the spindle shaft. Make a half hitch loop around the shaft to secure the yarn.
4. Stand with carded rolags under your arm and hold handle at chest high.
5. Attach a rolag to the yarn by overlapping the ends and twisting them with your fingers.
6. Draw out fibers from the rolag by grasping them with the thumb and forefinger of your right hand and pull them with your left hand.
7. Release your right hand only. Twist the spindle to allow the twist to run into the drawn fibers. Keep hold with your left hand to keep the twist from running up into the rolag.
8. Continue to draw out the fibers. Release your right hand. Twist the spindle in the same direction. Allow the spindle to drop as more fibers are drawn out and the yarn is spun.
9. When the spindle reaches the floor, undo the loop at the notch of the spindle, wind a few turns around the shaft near the whorl, then wind up and down the spindle shaft so that when it is full it makes a cone. Allow each layer to come a little higher up the shaft. Leave enough unwound to start spinning again.
10. Continue this process of drawing out fibers, twisting, and winding until it is time to rotate.

## **Station Clean-up**

1. Remove large pieces of wool from the area around the table, pick up any loose pieces and dispose of into trash cans.
2. Attach a new string for the next program to each drop spindle.
3. Remove extra wool from the carders and place the wool in the basket.
4. All carders and spindles should be returned to the ESP supply shed.



Attach starter yarn (dark) to rolag fibers.



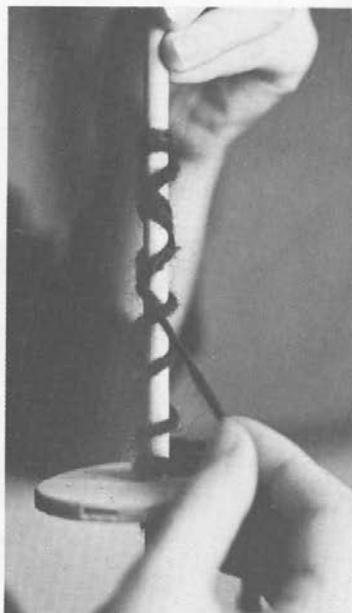
4. Draw out fibers between thumb and forefinger of each hand.



5. Twist spindle with left hand.



Allow spindle to drop toward floor.



7. Wind yarn up and down spindle (dark starter yarn is wound first).



8. Repeat steps 3-7 until the spindle is full.

The Spinning and Carding instructions were taken from [Step by Step Spinning and Dyeing](#) by Eunice Svinicki.

## **Weaving**

It is a great follow up activity to bring the spun wool back to the classroom and use it to weave on looms that the kids make in the classroom. This is easily done with a board or cardboard lid and some nails.