

# From Sheep to Sweater

Objective:

Students will learn how wool is processed to make knitted garments.

Grade Level: 2 – 6

Groupings: Groups of nine or more students

Materials: (per group)

- Cards or props that represent the processing steps from grass to butter (see step #2)
- Toy sheep or puppet
- Scissors to represent sheep shears
- Bag of raw fleece
- Dog grooming brushes or wool carders
- Sample of carded wool
- Drop spindle
- Skein or ball of white yarn
- Enamel pot with package of dye or natural dye recipe
- Skein of colored yarn
- Knitting needles
- Knitted wool sweater

Time Allotment: 20 minutes

Directions:

1. Explain to the students that on farms long ago there were usually several different animals. Each animal provided the farmer and his or her family with important products they could use for food and fiber. Ask the student to name some farm animals and the products they gave to farm families.
2. Point out that sometimes a product could be used directly, as in the case of milk or eggs to eat. Other times they would process the initial farm products – using tools, methods or recipes involving other ingredients – to make other needed products. For example, milk can be turned into butter, ice cream, sour cream or other dairy foods. Show the students a few of the cards or props that represent the steps in the sequence from grass to butter. Ask them to put these in order. (Grass, milking bucket, milk, butter churn, butter.)
3. Challenge the students to put another common processing technique in the proper sequence. Explain that it involves another farm animal and was done in homes in the United States until the late 1800's (and is still done in homes in other parts of the world today). The whole family was involved in the process. Explain that you will

pass out objects that represent the various steps in the process. Some people will be given the animal or some of the products (or a representation), and others will be given the tools to change the original product from one form into another. Refer to the original example of cow to butter if necessary.

(The sequence has eleven steps in it. You can adjust the number of students in each group to match class size by deleting optional steps or adding completely unrelated props. Be sure to tell students if unrelated props are included.)

4. If you feel your students are up for an added challenge, tell them they will not be able to talk during the sequencing. Give them time to brainstorm other ways to communicate the sequence order without talking.
5. Pass out the objects in random order. Ask them to look closely at their object. If they have a tool, tell to look for clues to its function. If they have a product, ask them to compare it with the others to see how it has changed. Allow time for students to compare items and determine the sequence order. If necessary, tell them that the alternation of tools and products is another clue to the sequence order.
6. As a class, review the steps in the process. Starting at the beginning, let each student identify the object he or she is holding and discuss how it was used or made. The process begins with the sheep (*toy sheep or puppet*). Special breeds were raised for their wool. The wool is sheared off the sheep with shears (*scissors*). The fleece (*small piece of raw wool*) is thick, tangled and smells of lanolin. This lanolin feels greasy and acts as a waterproof protection. The fleece is picked clean of sticks, twigs and bits of plant material and then untangled or carded using carders (*dog grooming brushes*). The untangled wool is called rolags or rolls (*sample of carded wool*). These rolls are twisted using a *drop spindle*. This forms yarn that is wound onto bobbins or into skeins (*ball or skein of white yarn*). When different colors of yarn were desired, the skeins were placed in a dye bath (*pot with dye packet*). The skein absorbed the dye, and the color was set in the yarn (*colored skein of yarn*). The colored yarn was then knitted into pieces with *knitting needles*. These pieces were sewn together to make a *sweater*.

#### Extensions:

1. Have the students try their hand at carding and spinning wool. Find an experienced parent to help you or contact your local craft shops or sheep farmer's extension office to learn of a contact person.
2. Have the students check the tags in each other's clothing to see what they are made of. Make a list of the materials and classify them into natural and synthetic products. Research where each comes from and how they are processed.
3. Have the students research other fibers that are spun into yarn.

4. Explain to your class that knitting is just one way wool yarn is processed to make clothing. Woolen coats and blankets are woven on looms. Have the students make their own simple looms by notching two opposite ends of a 5"x5" piece of cardboard. Have them wind a piece of yarn between the notches to create a series of parallel strands and tie it off at the back. Then, using other pieces of yarn, have them weave over and under the alternating strands of yarn on the loom from one side to the other to create a piece of woven fabric.