



Grade Level: K-2

Essential Skills: 4, 5, 9

CCSS: K.RL.1, K.RL.3, K.RL.10, K.SL.2, K.SL.6, 1.RL., 1.SL.2, 2.RL.2, 2.SL.2

Time: 45 minutes

Materials:

Wool Spinning Kit* or:

- Carded wool
- Wool spinning hook per student
- *Sheep to Sweater* activity sheet

AITC Library Resources:

Books:

Weaving the Rainbow
Sheep - A True Book
Heart of a Shepherd
Wool Fiber in the Making

More Lessons:

A Tail of Two Sheep
Animal Life Cycles
Counting Sheep or People?
Farm Animal Match

Wool Spinning

Description:

Students will get hooked on wool spinning as they learn about wool and where it comes from. Using carded wool and spinning hooks, students will create friendship bracelets to wear home!

Activity Directions:

Part 1: Charlie Needs a Cloak

1. Explain to the students that a shepherd is a person who cares for sheep. Tell the class that they are going to look at a book about a shepherd named Charlie.

2. Read the book *Charlie Needs a Cloak* by Tomie DePaola. When reading the story, provide the following information about each process of wool production:

Page 1: A shepherd is a person who cares for sheep.

Pages 2-3: A cloak is a coat without sleeves.

Pages 8-9: During the winter, the wool of sheep grows thick and heavy to keep the animals warm. In the spring when the weather begins to warm up, sheep no longer need their wool. Farmers or professional shearers cut or shave the wool off of the sheep. This process is called shearing.

Pages 10-11: Wool is washed to clean out any impurities.

Pages 12-13: Special brushes called carding brushes are used to card wool, making the wool fibers smooth and straight. After the wool is carded, it is divided into thin, round strips called roving.

Pages 14-15: Wool roving can easily be pulled apart. To strengthen the wool, it is spun into yarn.

Pages 16-17: Wool is very absorbent which makes it easy to dye. Wool can be dyed any color.

Pages 18-21: Wool yarn is woven on a loom to make cloth.

Pages 22-31: The wool cloth can be cut, pinned, and sewn to make clothing like Charlie's new cloak.

Part 2: Wool - From Sheep to Sweater

1. Provide each student with a copy of the *Sheep to Sweater* activity sheet.

2. Have the students cut out each of the pictures and order them to show how the wool in the story *Charlie Needs a Cloak* was processed. It may be useful for students to reference the pages in the story as they order the pictures.

3. After students have the correct sequence from sheep to sweater, instruct them to glue the pictures onto the sheep in order.

4. Explain to the students that the boxes containing the letter 'M' show tasks that are performed by machines when wool is processed in large quantities.

5. (Optional) View the Pendleton Woolen Mills Tour video to see how machines are used to process wool: https://youtu.be/DGN4_FDx1YE

Part 3: Spinning Wool

Check out our video online detailing this activity step-by-step: https://youtu.be/By_8idoDZCc

1. Give each student a piece of carded wool approximately ¼" wide and 14" long. Fold about ½" of wool over the end of the spinning hook and begin spinning.
2. Back your non-spinning hand out as the wool is spun; this is called drafting.
3. Draft out the wool so that the spun wool is taut but not bumpy. If you get twisted bumps in your spun yarn, let out more unspun wool. When you have twisted the entire length of the wool, don't let go—it will unspin. You are ready to ply your yarn!
4. Plying the yarn will keep it from unspinning and make it stronger. Plying is the twisting together of two single strands of spun wool. Have someone hold the center of the twisted wool while you hold the ends.
5. Bring the ends of the wool together in one hand so that there are two strands side-by-side. Have your helper let go, and let the wool twist together. It should spring into a twisted strand. The double strand is now called plied yarn.
6. Tie the plied yarn around your wrist to form a friendship bracelet.

Vocabulary Terms:

Draft: The pulling out of fibers to allow only a certain amount of the fiber to twist into thread

Plying: Winding two or more yarns together; must be done in the opposite direction to that in which they are spun

Extension Activity

Kool-Aid Dye Method

1. In a glass bowl, combine 1 package of Kool-Aid, 1 cup of water, and 1 tablespoon of vinegar. Stir until the Kool-Aid completely dissolves.
2. Completely immerse an arm's length of wool into the Kool-Aid mixture.
3. Place the bowl of wool and Kool-Aid mixture into a microwave. Heat on high for two minutes.
4. Remove the bowl from the microwave and allow to cool. BE CAREFUL, IT'S HOT!
5. After the mixture has cooled, squeeze the liquid out of the wool and into the bowl. If the liquid is fairly clear, rinse the wool in cold water. If the liquid is not clear, heat the bowl of wool and Kool-Aid mixture for one additional minute before cooling and rinsing. This process will result in dyed wool that you can allow to dry and use in other projects.

Sheep to Sweater...Baa, Bam, Ewe

Cut out the pictures and place them in order from sheep to sweater.

The M on the picture means that a machine usually does this.

1	2	3	4
5	6	7	8

