HOW FABRIC IS MADE: LEARN TO WEAVE AND MAKE A PLACEMAT

4-H Clothing and Textiles Project



Part of the Family and Consumer Sciences 4-H Project Series

As we select clothes to wear on any given day, there are lots of reasons we pick a specific garment. One important reason is for comfort. The fabric the garment is made from can determine the comfort. Knowing how the fabric is made can help you know how it will feel, if it will be durable, and if it will stretch. In this activity you will learn about woven fabrics and learn the basic weave (Plain Weave).

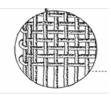
Weaving fabrics is an old art, taking place at least 9,000 years ago in the Middle East. While the speed of weaving has increased dramatically in recent years, the basic process and patterns have remained the same.

Woven fabrics can be characterized generally by their stability, with little give (elasticity). This means that you need closures such as buttons, zippers or snaps to get in and out of garments made from woven fabrics. Pull out a few items in your closet and try to stretch the fabric. If it stretches it is probably knit, but if it doesn't, the fabric is probably woven.

Weaving is the interlacing of yarns. **Warp** yarns run vertically in fabric and are the strongest yarns. **Filling** yarns run the width of fabric.

<u>**Plain weave**</u> – Interlacing warp and filling yarns, over one and under one. This is the most common weave used in woven fabrics. Common plain weave fabrics: chiffon, calico, gingham, muslin

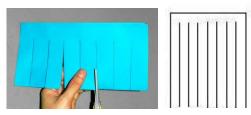
Here's a close-up example of a plain weave.



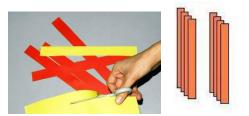
Now it's time to take what you have learned and practice weaving with paper. You can make placemat or a piece of art to frame with what you make.

Directions for weaving a plain weave, making a placemat:

1. Cut one- inch wide strips of construction paper or other colored paper. Do this leaving the top part of the paper in tacked.



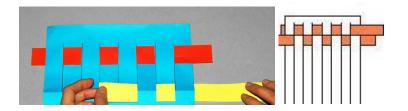
2. Cut colored paper strips, 1 inch wide.



3. Begin your weaving by doing an "over-one-under-one" pattern.



4. Move the woven strip to the top and start with the next one and weave the second strip in an opposite pattern as the first. If your first strip started "over and under", the second strip should go "under and over".



- 5. Weave more strips in an alternating pattern until you get to get within 2" of the bottom.
- 6. Flip over the woven mat. Fold the protruding strip-ends to make them flush with the edges. Use tape to hold down. You can also cut the side protruding strips flush with the edges on the side and tape under the long end of the strips.
- 7. Before using your placemat, you will want to seal it by laminating it. Laminating sheets are available at any craft store or you may have access to a laminating machine. If not, use this as a bed side table decoration of frame it to hang on the wall.

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