COMPETENCY #5: Identify the different fabric construction techniques. Include: woven, knitted, non-woven, and bonded.

CONCEPT: Fabric begins with basic components - fibers. The resulting fabric depends on the process the fibers are put through. Example: cotton fibers can be woven, knitted, non-woven or bonded fabric depending on the process.

## MOTIVATORS:

Assign students areas to sit around the room according to the types of weaves found in their shirts, blouses or tops.

Invite students to try to figure out why you have grouped them in that manner.

Discuss the differences of each group, compare qualities, advantages and disadvantages that the student may have noticed about this particular weave.

## VOCABULARY

- 1. <u>NON-WOVEN</u> is a fabric construction process in which the fibers are not twisted into yarns, they are used as is and arranged directly into fabric.
- 2. <u>WOVEN</u> is a type of fabric in which two or more yarn strings are woven in at right angles.

TYPES OF WEAVES:

- a. <u>Plain</u> over one, under one...next row opposite. <u>Checkerboard</u> this is the most common weave.
- b. <u>Twill</u> over one under two or over two and under two or over one under three etc. The second and each succeeding row moves over one and begins again. This is a very strong weave.
- c. Satin under one over four or more up to eight. 2nd row skip 2 and repeat. This is the weakest weave, but is desired for its shiny surface. Satin is a weave, not a fabric.

- 3. <u>KNITTED</u> is a type of fabric where there are interlocking loops of yarn making up the main body of the cloth.
- 4. <u>BONDED</u> is a type of fabric where fibers are bonded or held together by chemical, mechanical, or thermal means.

## ASSIGNMENT:

After studying the various types of weaves, students may, for further development, complete the <u>Weave Study Assignment</u>. Assignment sheet follows.