

Making the Most of Instructional Time Five Minute Lessons

Class Starters and Enders help utilize the last minutes of class when a lesson ends but there is not enough time to start another, or for an interest approach at the beginning of class. Mini-lessons correlate to GPS in the programs areas below.

The Weaving Loom

Program Areas: Agriculture, Business, Marketing, and Fashion.

Instructions: Read the narrative and make notes of important points, answer questions, if provided, and be ready to discuss this topic.

Before fabric and clothing were mass produced and sold to the general public, textiles were most likely created by hand on **weaving looms**. **Weaving** is the art of interlacing two or more elements to form a structure, usually a textile. It's a process that has been thought to have been done since 7000 to 8000 B.C. in Mesopotamia and Turkey, though the actual date of origin is contested. Woven elements were used to create netting to help catch fish and game, coverings for dwellings, insulation, and crafts as well as fabric. Evidence shows weaving occurring in the cultures of Egyptians, Hebrews, Chinese, Swiss, and Peruvians throughout history. Research suggests different types of looms were created on each continent.

The basic idea of the loom is to have a frame to weave vertical threads – the warp – and horizontal threads – the weft – across each other. The first looms were vertical structures called warp-weighted looms. The weaver would suspend warp fibers from a tree branch parallel to the ground or create a loom from tree limbs and branches. The threads would be weighted down with stones or baked clay, and the weft would be created by walking back and forth in front of the loom, lifting one warp thread at a time. The weaver would then push the weft threads up using her hand or a comb. Eventually a device called a shed stick was designed, which allowed weavers to make clear passages for the weft threads to go through faster.

Another early loom was the horizontal ground loom. This involved driving equally spaced



Floor looms such as this one picture above use a pulley and lever system to help free up the weaver's hands.

sticks into the ground in parallel lines, and wrapping the warp threads around them. The weaver would have to stand over the tensioned warp and weave from one end to the other. This posture was very uncomfortable, so the **pit loom** was developed. The loom was placed over a pit dug into the ground, so the weaver could sit on the edge of the pit and be on the same plane as the loom.

Both the **frame loom** and the **backstrap loom** were portable. The frame loom could be held in one's lap or placed on a table. With the backstrap loom, one end is attached to a fixed point and the other to a rod that was held in place with a cord that wrapped around the waist of the weaver. When the weaver leaned against the cord, he tensioned it, making it easier to weave the weft. A type of loom known as the **floor loom** use a pulley and lever system as well as a **foot treadle** to raise and lower warp threads. This frees up the weaver's hands and allows her to pass the weft threads back and forth without interruption.

Most modern looms, however, are **computer driven looms**. These looms make it easier for weavers to keep track of thread count, dimensions, repetition, and other numbers involved in the weaving process.

Review

- 1. Name three things that can be produced by weaving.
- 2. What two kinds of threads are used in weaving?
- 3. What was the first type of loom called?
- 4. Why was the pit loom developed?
- 5. How does a floor loom work?

Language Connection

Define the following terms.

Backstrap Loom Horizontal Ground Loom Weaving
Computer Driven Loom Pit Loom Weaving Loom
Floor Loom Shed Stick Weft

Foot Treadle Warp

Frame Loom Warp-Weighted Loom