

Topics: Patterns,
Weaving, Traditional Arts

Materials List

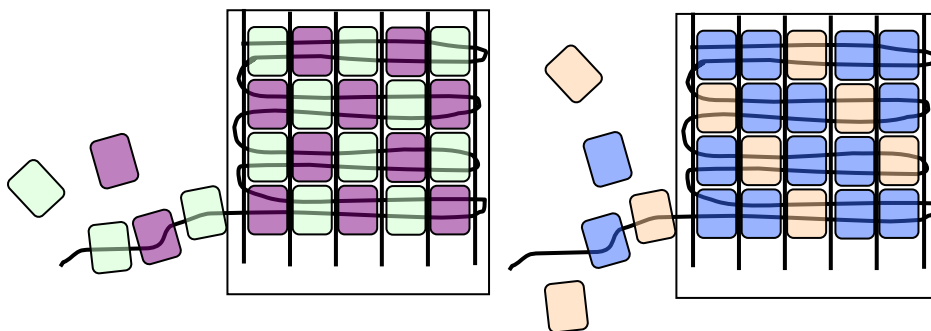
- ✓ Pony beads
- ✓ Matte board
- ✓ Crochet thread or dental floss (waxed)
- ✓ Masking tape
- ✓ Toothpick or 3 mm (1/8") diameter straw
- ✓ Pencil
- ✓ Ruler

This activity can be used to teach:

- Observing Patterns (CA Math Standards: Mathematical Reasoning: Grade 3, 1.1; Grade 5, 1.1; Grade 6, 1.1; Grade 7 1.1)
- Traditional life and adaptation to environments (CA Social Science Standards: Grade 5 (Pre-Columbian America), 1.1; Grade 6 (Ancient Civilizations), 1.1 and 1.3)

Bead Weaving

Encoding Patterns with Pony Beads



Traditional bead weaving is a bit easier with this larger-sized version of a bead loom.

To Do and Notice

1. Mark 5 mm (~1/4") increments onto matte board.
2. To string the warp threads, wrap crochet thread or dental floss around the matte board aligned to the marked increments. Tape the warp strands in place.
3. Insert a pencil under the warp threads so they are raised slightly from the loom.
4. Knot a long weft string onto the left warp strand. Tape the other end of the weft string to a toothpick or thin straw to act as a needle.
5. String beads onto the straw equal to 1 less than the number of warp threads (e.g. – in the illustrations, there are 6 warp threads, so 5 beads should be strung onto the weft at a time.)
6. Lay the strung bead row over the warp, and then thread the weft back through the beads going under the warp threads.
7. Continue in this manner until the desired number of woven rows is complete.
8. Cut the warp off of the board at the back of the loom, gather the warp threads together and tie an overhand knot to secure each end.

The Content Behind the Activity

“Creating, describing, and extending patterns” is part of the “Statistics, Data Analysis, and Probability” strand of the mathematics standards for California. Like all skills, development should begin at a very early age. As students’ abilities grow, more difficult patterns can be introduced. Eventually, students will be ready to represent these patterns as mathematical equations.

Historically, beads played an important role in American culture. Native Americans used beads made of shell known as Wampum (*wampumpeake*) for record keeping, elections, council business, and for decoration. English settlers actually used these beads for money instead of coins. Today, artisans create intricate bead weaving works using tiny, seed beads.

Web Resources (Visit www.raft.net/more for how-to videos and more ideas!)

- Several bead loom patterns can be found at: www.beadiefriends.com/PatternInfo.htm
- For more information on the story of Native American beading, see: www.thebeadsite.com/FRO-WAPM.htm or www.kstrom.net/isk/art/beads/art_bead.html