1 String

A loop made from a 1-span string works well for most string figures. Simpler figures require a loop made from a $\frac{1}{2}$-span string, whereas complicated designs can require loops made from $1\frac{1}{2}$, 2, 2$\frac{1}{2}$, or even 3-span strings!

To join the ends of a string made from synthetic fibers (nylon, polyester), flame the ends until they melt, then touch them together. For a string made from natural fibers (cotton, hemp) use molten nylon as glue.

2 Fingers

The fingers of each hand are numbered 1 through 5, starting with the thumb.
L and R stand for “Left” and “Right.”

Examples
- 3 means “middle finger of each hand.”
- L1 means “left thumb”
- R4 means “right ring finger”

3 Loop names and commands

Loops are named after the fingers they surround. In this illustration of “Opening A” there is a 1 loop, a 2 loop, and a 5 loop on each hand.

When making string figures, loops are often released, transferred, rotated, exchanged, shared, or navahoed.
Release 1 loop means...“Let the loop on finger 1 of each hand slip off, then separate the hands to absorb the slack.”

To transfer a loop from one finger to another, we use the command remove.

2, from below, removes 1 loop means...“Finger 2, from below, enters the loop on finger 1, then finger 1 releases its loop.”

A loop can also be removed from above, in which case the loop is inverted.

Since hands and fingers are not always held in an upright position when making string figures, we define above to mean “from the fingertip side” and below to mean “from the knuckle side.” Experts often use the terms distal and proximal to avoid confusion.

To twist a loop, we use the command rotate. A loop can be rotated away from you (in the direction of finger 5) or towards you (in the direction of finger 1).

Rotate L2 loop a full turn away from you.  Rotate L2 loop a full turn towards you.

A loop can also be rotated a half turn in either direction, but this requires lifting the loop off the finger with the opposite hand, rotating it, and replacing it (not shown).
To pass a loop on one hand through a loop on the other, we use the command *exchange*.

*Exchange 2 loops, inserting 2 from above, passing R loop through L loop means...*

“Bring fingertips together and insert left finger 2, from above (i.e., from the fingertip side), into the loop on right finger 2...then withdraw right finger 2 and insert it, from above, into the lower loop on left finger 2 (i.e., the loop nearest the knuckle) and lift the lower loop off the left finger, over the upper loop (i.e., the loop nearest the fingertip)...then separate the hands to complete the exchange.”

To create two loops from one, we use the command *share*.

*Share the 1 loops, inserting R1 first means...*

“Bring the hands together and insert right finger 1, from below, into the loop on left finger 1...then withdraw left finger 1 and insert it, from below, into both loops on right finger 1...and separate the hands. The *katilluik* move begins like this.

To pass one loop through a second loop on the same finger, we use the command *navajo*.

*Navajo 2 loops means...*

“With the help of the opposite hand (or your mouth) lift the lower loop on finger 2 over the upper loop on finger 2 and release it.

Kathleen Haddon coined the term in 1912 after noticing that the technique is common among the Navajo people of the American Southwest.
Each loop has a near string (n) and a far string (f).

**Examples**
- $2n$ means “the near string of the loop on each finger 2.”
- $L2f$ means “the far string of the loop on the left finger 2.”

When making a string figure, strings are either picked up, hooked up, or hooked down...

1, over 2 loop, picks up $5n$ means...“Pass finger 1 of each hand away from you, over the loop on finger 2, then with the nail side of finger 1 catch the near string of the loop on finger 5 and return finger 1 to its original position.”

2, over 5n, hooks up 5f means...“Pass finger 2 of each hand away from you, over the near string of the loop on finger 5, then, with the fingerprint side of finger 2, catch the far string of the loop on finger 5 and return finger 2 to its original position, in this case by rotating it half a turn towards you.”

5, under 2f, hooks down 2n, closing it to the palm means... “With the fingerprint side of finger 5 of each hand, press down on the near string of the loop surrounding finger 2 of each hand until the fingertip of finger 5 touches the palm.”

*Note: Perform all actions with both hands simultaneously. If an R or an L precedes a finger, loop, or string name, perform the action on the indicated hand only.*