

# MAKERY PROJECT: Winter Hat

(using the knitting machine  
and pom pom maker)

**TIME:** 1 hour

**SKILL:** Beginner

Use the Makery's knitting machine and pom pom maker, you can create a functional made-by-you masterpiece winter wear. Makes a great gift!

**Note:** Children younger than middle school must be directly supervised by an adult.



## Materials You Need to Bring



1 SKEIN LIGHT YARN  
(SEE TIPS AT RIGHT)



1 SKEIN DARK YARN  
(SEE TIPS AT RIGHT)

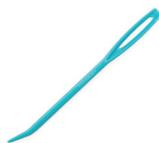
## TIPS:

- Bringing extra materials is always a good idea.
- Look for this symbol on the yarn packaging to find the correct weight: 
- Tutorials: [elmlib.org/knittingmachine](http://elmlib.org/knittingmachine)
- Knitting machines are also available for checkout in the Library of Extraordinary Things [elmlib.org/knitmachine](http://elmlib.org/knitmachine)

## Equipment Provided in the Makery



KNITTING  
MACHINE



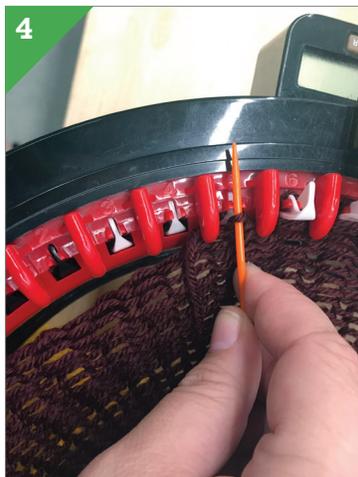
TAPESTRY  
NEEDLE



SCISSORS



POM POM  
MAKER



## 1 PREP:

Bring your yarn to the Makery. Ask a Makery staff member for the knitting machine and the blue pom-pom maker.

## 2 CAST ON:

- Ensure the red switch on the front of the machine is down. Turn the handle so the red carriage turns counter-clockwise. Stop at the first black needle.
- Measure a 12-inch tail of dark yarn and place in the center of the machine. While slowly turning the handle, pass the yarn through the front of the first black needle, behind the second, and in front of the third. Continue threading the yarn behind every other needle until you reach the first black needle again.
- Slide open the brown yarn holder and pull the yarn down to ensure it snaps through the front. Slide the top closed.

## 3 KNIT:

Continue turning the handle until the counter reaches 105. Cut the maroon yarn six inches outside the tan yarn holder. Tie it to the light yarn in a secure knot. Keep turning the handle to knit another 15 rows, taking care not to catch the knot as the machine turns.

**NOTE:** Apply steady, even, and firm pressure as you turn the handle. Deviations in direction, speed, or tension on yarn, can cause snags, dropped stitches, and imperfections in your finished piece.

## 4 CAST OFF:

Cut the yarn 18 inches outside the yarn holder. Thread the cut yarn through a tapestry needle. Coming from the center of the machine, push the tapestry needle through the center of the two prongs surrounding the knitting machine needle, and through the loop of yarn. Turn the handle until you hear a faint “click” and use the tapestry needle again to thread through the next loop on the prongs. Continue until all yarn is off the machine.

**NOTE:** Carefully pull the needle horizontally (parallel to the table surface) through loops, to ensure you don’t pull off the yarn on neighboring prongs.

## 5 SHAPE:

- Take the two long yarn ends from the start and finish of the hat. Put the dark yarn end inside the light yarn end. You should have a double-layered tube at this point.
- Secure the tops together. Wiggle the ends around to get a small enough (dime size) hole before knotting the two ends together several times until secure. Thread the ends through the hole with the tapestry needle, then cut the extra yarn.

## 6 POM POM:

- To create the pom, follow the directions at [elmlib.org/pom](http://elmlib.org/pom).

**NOTE:** To make a multicolor pom, simply hold the ends of multiple yarn colors together and work as if they were one.

- To attach the pom, use the tapestry needle to thread one of the longer yarn strands just to the left of the hole in the hat. Thread the other yarn strand just to the right of the hole. Flip hat inside out, tie ends securely, and cut off excess yarn.