

# SPROCKETS SOCKS

a knitsnknishes™ design by Susan Lutsky




PHOTO 1

**One Size Fits Most** - approx 6¼" circumference, relaxed. (The pattern is quite stretchy.) This pattern is knit cuff-down, using medium-to-heavy fingering weight yarn (approx. 350 to 375 yards, approx. 4 ounces).


- Gauge: approximately 32 stitches/4 inches in stockinette, knit in the round.
- Needles: Whatever size needles you need to achieve proper gauge and sizing (estimated US size 0, or 2.00mm, to US size 2, or 2.75mm).  
→ *(Tip / Optional: Use a smaller size needle for heel flap, heel, sole, & toe.)*
- This pattern will work best if knitted on either two circular needles, or on one circular (Magic Loop method).  
→ If you choose to use dpn's, please take extra care in dividing the stitches among the needles so as not to break up a 9-stitch repeat. Suggested division of stitches for using dpn's: needles 1 & 3 with 18 sts each, and needles 2 & 4 with 14 sts each (which will become 16 sts each after increasing in the last row of ribbing), with needles 1 & 2 holding the stitches that will eventually be used for the instep, and needles 3 & 4 holding the stitches that will eventually be used for the heel flap, heel, & sole. (In this case, you would use a fifth dpn as your working needle.)


## Chart Symbols, Stitch Abbreviations, & Explanations:


 K (knit)


 yo (yarnover)

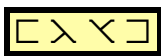
 P (purl)

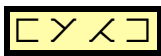
 K2tog (Knit 2 sts together)

 M1R (Make 1 st, right-leaning)  
Insert left needle from back to front under horizontal strand between last st worked & next st on left needle, then knit the strand thru front loop.

 ssk (slip, slip, knit)  
Slip 2 sts knitwise, separately; reinsert Left needle into the 2 sts, then knit the 2 sts together thru the back loops.)

 M1L (Make 1 st, left-leaning)  
Insert left needle from front to back under horizontal strand between last st worked & next st on left needle, then knit the strand thru back loop.

 C4L (Cable 4 Left) Place 2 sts on cable needle & hold in front of work; k2, then knit 2 sts from cable needle.

 C4R (Cable 4 Right) Place 2 sts on cable needle & hold in back of work; k2, then knit 2 sts from cable needle.

**Cast on 64 stitches.** A stretchy cast-on (such as the Twisted German cast-on, or other similarly elastic cast-on) is recommended. Join to work in the round, without twisting.

**Divide stitches among needles** (32 per needle if using 2 circs or magic loop).

### Ribbing

Do approximately 1" of ribbing according to *Chart 1*, or as follows (each round):

\*[K1, p2, k4, p2] 3 times, k1, p1, k2, p1; repeat from \*.

**Chart 1 Ribbing**

-       -	- -           - -	-       -	- -           - -
Work this section once	Work this section 3 times.	Work this section once.	Work this section 3 times.

### Last row of ribbing

Work last row of ribbing according to *Chart 2*, or as follows:

\*[K1, p2, k4, p2] 3 times, k1, p1, M1R, k2, M1L, p1; repeat from \*: 68 sts

**Chart 2 Last row of ribbing**

-       -	- -           - -	-       -	- -           - -
Work this section once.	Work this section 3 times.	Work this section once.	Work this section 3 times.

## Leg

Work pattern according to *Chart 3*, or as follows, til approximately 7” or desired length from cast-on edge, ending with Round 6 of pattern, and finishing the round on Needle 2.

- Round 1: \* [K1, p2, k2tog, yo twice, ssk, p2] 3 times, k1, p1, k4, p1; repeat from \*.
- Round 2: \* [K1, p2, k2, p1, k1, p2] 3 times, k1, p1, k4, p1; repeat from \*.
- Rounds 3 & 4: \* [K1, p2, k4, p2] 3 times, k1, p1, k4, p1; repeat from \*.
- Round 5: [K1, p2, k2tog, yo twice, ssk, p2] 3 times, k1, p1, C4L, p1;  
[k1, p2, k2tog, yo twice, ssk, p2] 3 times, k1, p1, C4R, p1.
- Round 6: Same as Round 2.
- Rounds 7 & 8: Same as Rounds 3 & 4.
- Round 9: Same as Round 1.
- Round 10: Same as Round 2.
- Round 11:  
[K1, p2, k4, p2] 3 times, k1, p1, C4L, p1;  
[k1, p2, k4, p2] 3 times, k1, p1, C4R, p1.
- Round 12: Same as Rounds 3 & 4.



PHOTO 2

### Chart 3 Cuff / Leg pattern

-					-		-	-						-	-		-					-	-		-	-		12											
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Work this section once.					Work this section 3 times.					Work this section once					Work this section 3 times.																								

### Prepare for Heel Flap

Next round (after completing Round 6, above):

\* [K1, p2, k4, p2] 3 times, k1, p1, k2tog, **ssk**, **p1**; repeat from \*: 64 sts.

Next: Move last 2 stitches from end of first needle (i.e., the **ssk** and **p1**) to beginning of second needle, and move last 2 stitches from end of second needle to beginning of first needle. *If you miss this step, the ribbing on the heel flap will not flow as it should from the pattern on the leg; see Photos 1 & 3.* (Note: These directions are for magic loop or 2 circular needles; adjust which stitches to move accordingly if you are working on dpn's.)

Next *half*-round - *Work on Needle 1 only:*

*K1, p1, [k1, p2, k4, p2] 3 times, k1, p1, k1; do not repeat.*

**Note:** The first 2 stitches on Needle 1 will already have been worked prior to having been moved from Needle 2 to Needle 1. (*The first row of the heel flap [following], worked on Needle 2, replaces the second half of this round.*)



PHOTO 3

### Heel Flap (worked back & forth on 32 sts on Needle 2)

**TIP ~ Optional:** Use a smaller size needle for heel flap, heel, gusset, & sole stitches. (This would require switching to 2 circulars at this point if you had been using either the magic loop method or dpn's.)

Row 1 (RS): Sl 1, p1, [k1, p2] 9 times, k1, p1, k1.

Row 2 (WS): Sl 1, k1, [p1, k2] 9 times, p1, k1, p1.

Repeat rows 1 & 2 approximately 15 *more* times or until heel flap is desired length (typically in the range of 2 to 2.5 inches), ending with a WS row.

### Turn Heel

Row 1 (RS): Sl1, k18, ssk, k1. Turn.

Row 2 (WS): Sl1, p7, p2tog, p1. Turn.

Row 3 (RS): Sl1, knit to 1 st before gap, ssk (across gap), k1. Turn.

Row 4 (WS): Sl1, purl to 1 st before gap, p2tog (across gap), p1. Turn.

Repeat rows 3 & 4 until all stitches have been worked: 20 sts remaining.

### Gussets

Knit across heel stitches (Needle 2). Pick up & knit 16 sts along edge of heel flap (more or less, depending on total # of rows in heel flap, generally equal to half the number of rows that you knitted in the heel flap), plus one stitch between heel flap & instep.

Knit across instep (Needle 1) in pattern (should begin with **Round 1 of Chart 4**).

Pick up & knit one stitch between instep & other side of heel flap, and pick up & knit **16** sts along remaining side of heel flap (or same # as on first side of heel flap).  
Knit across heel flap & gusset stitches.

**TIP:** When knitting the stitches that you picked up along the sides of the heel flap as well as the stitches that you picked up between the heel flap and the instep (on both sides of the heel flap), knit those stitches through the back loop in order to avoid loose stitches or the appearance of holes. (On the next round, knit those stitches through the front loop as usual.)

Begin gusset decreases:

- Round 1 - Needle 1: Work across instep in established pattern.  
Needle 2: K1, SSK, knit across to last 3 sts; k2tog, k1.
- Round 2 - Needle 1: Work across instep in established pattern.  
Needle 2: Knit across.

Continue working Rounds 1 & 2, decreasing on gussets every other row until there are **32** sts remaining on Needle 2 for sole/bottom of foot.

## Foot

Continue working in established pattern according to *Chart 4* or as follows below for instep (needle 1), and in stockinette on sole (needle 2), until approximately 2 inches less than total length needed for foot, ending with Round 3 or 4 of instep pattern.

Instep Round 1: K1, p1, [k1, p2, k2tog, yo twice, ssk, p2] 3 times, k1, p1, k1.

Instep Round 2: K1, p1, [k1, p2, k2, p1, k1, p2] 3 times, k1, p1, k1.

Instep Rounds 3 & 4: K1, p1, [k1, p2, k4, p2] 3 times, k1, p1, k1.

**Chart 4 Foot / Instep (worked on 32 sts)**

	-		-	-					-	-		-		<b>4</b>
	-		-	-					-	-		-		<b>3</b>
	-		-	-		-			-	-		-		<b>2</b>
	-		-	-	N	O	O	Λ	-	-		-		<b>1</b>
Work once.		Work this section 3 times.										Work once.		

## Toe

If you are using 2 different sized needles (for instep & sole), switch to using only one size (preferably the smaller size) for completion of sock.

Round 1: \*K1, SSK, knit across 26 sts, k2tog, k1, repeat from \*.

Rounds 2 & 3: Knit.

Round 4: \*K1, SSK, knit across 24 sts, k2tog, k1, repeat from \*.

Rounds 5 & 6: Knit.

Round 7: \*K1, SSK, knit across to last 3 sts on needle, k2tog, k1, repeat from\*.

Round 8: Knit.

Repeat Rounds 7 & 8 until you have a total of **32** sts remaining, or **16** sts on each needle. Then repeat Round 7, decreasing each round, until you have a total of **16** stitches remaining, or **8** stitches on each needle.

Graft remaining stitches together using Kitchener stitch.

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PHOTO 4

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### Sample Info & Photo Credits:

#### **PHOTO 1**

Yarn: NummaNumma ToastyBoo  
(1 skein, 360 yds)

Knit & photographed by: Susan Lutsky

#### **PHOTO 2**

Yarn: Handmaiden Casbah  
(1 skein, 325 yds/115 grams)

Knit & photographed by: Pat Quetsch

#### **PHOTOS 3 & 4**

Yarn: Spirit Trail Fiberworks Sock  
(1 skein, 400 yds)

Knit, modeled, & photographed by: Jaya Purswani

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