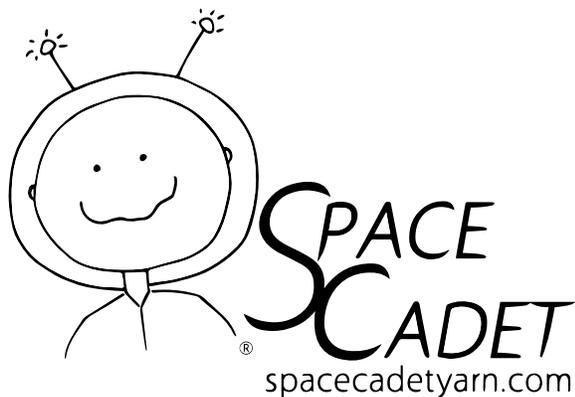


# The SpaceCadet's Quick Guide to How to Read Your Hand-Dyed Yarn's Colour Repeats





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Photography and layout by Stephanie Alford for SpaceCadet Inc.

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## *Hi there!*

I'm Stephanie and I'm the Head SpaceCadet at SpaceCadet yarn, an indie dye studio where we explore colour by dyeing gorgeous yarns in stunning colourways that we mix by hand from primary hues.

Whenever we go to a trunk show or a yarn festival, I get asked one set of questions in particular: *how will this yarn behave? will it pool? what will it look like?* And I'm always glad to delve into that, because finding the answer is so much fun!



## The First Step: *Open Up That Skein!*

There are several clues in your skein that will give you a good idea how it will behave, but there is one necessary, first step that I find many of our customers are reluctant to take. They turn a skein over and over in their hands and try to decide what it will look like as they knit or crochet it up. But **the real way to understand a skein is to untwist it and open it right up!**

Did you pause for a moment when you read that? Don't worry – most people



Observe how the skein looks in its twist, and then open it up. Does it hold any surprises? (colourway: Vortex)

do. I know how our yarns look in our lovely displays – piles of colourful skeins arranged just so – and you don't want to mess them up. But the truth is that, while you can often look at a commercial yarn all twisted up and get an idea of how it will behave, a hand-dyed yarn is completely different and you really have to get in there and look at it closely.

When yarn mills or really large dye houses create yarns, they usually blend the colours before they spin them, so any irregularities in colour get evened out, and what you see on the outside of a skein is very similar to what's happening on the inside, meaning that you can understand the yarn without untwisting it. But with hand-dyed yarn, the colour is added after the skein is spun, and so the colour can be very irregular – whether by design, as part of the dyer's technique, or simply because of how the colour distributes itself in the dyebath. Once that dye adheres to the yarn, there's little that can be done to change or even it out. Depending on how the yarn is dyed, the colour may or may not stay the same across the whole skein – meaning **what you see when you hold it twisted up might be very different from what it actually looks like when you open it out.**



*The first and most necessary step to understanding a hand-dyed yarn is to untwist and open it up! (colourway: Windswept)*

And so the first step to understanding how a colourway will behave when start to work with it is to untwist it and open it right up. Now I definitely don't speak for *all* dyers or yarn companies when I say that (and it's a good idea to ask before you untwist a skein), but I can tell you that, at SpaceCadet, we never mind if you untwist our skeins. In fact, we use tags instead of ball bands specifically so you can do that, because I truly believe you can't fully understand a colourway – particularly a variegated or one-of-a-kind – until you look at the whole thing.

(If you then twist it up again before you put it back, we're always grateful but, if you don't know how, just hand it to one of us and we'll be glad to put it back together for you. Or even to teach you, if you like! It's dead easy and we do it all the time.)

But for now, **go grab some hand-dyed skeins out of your stash** – particularly if there are some variegateds that you have never untwisted – **and have a good look at them.** Observe how they look in their twist... and then gently open them and see what you find. Does the inside hold any surprises? Is it different from the outside? Or have shades you didn't expect? Twist it back up again – perhaps starting from a different point and see how that affects the colourway.

So now, with that first step taken, what are you looking for? What's the magic inside the skein that will tell you how the colourway will behave? There are several things to look for and I'm going to cover **the most important: the length of the colour repeats.**

Pattern: Northeasterly by Skeinanigans, knit in a year's worth of mini-skeins from the SpaceCadet's Mini-Skein Club

The SpaceCadet's  
**Mini-Skein Club**

## What are *Colour Repeats*?

Because hand-dyed yarn is usually dyed in the skein with the yarn looping around in circle, the colour we apply to each area of the skein hits all (or at least several) of the strands at that point in the circle. When you are knitting or crocheting with it, the colours will repeat as you work your way around the circle again and again. Each change of colour is referred to as a colour repeat, and it's the length of these repeats that are so important to understanding how a hand-dyed colourway will behave.



(colourway: *Faded Dreams*)

**Bonus info:** The exception to this is single-skein gradients. These are dyed using a different technique that makes the colour change slowly from one end of the yarn to the other. So while the colours don't repeat the way they do in

a looped skein, the colour changes are often still referred to as colour repeats in casual conversation.

## What about *Semi-Solid* Colourways?

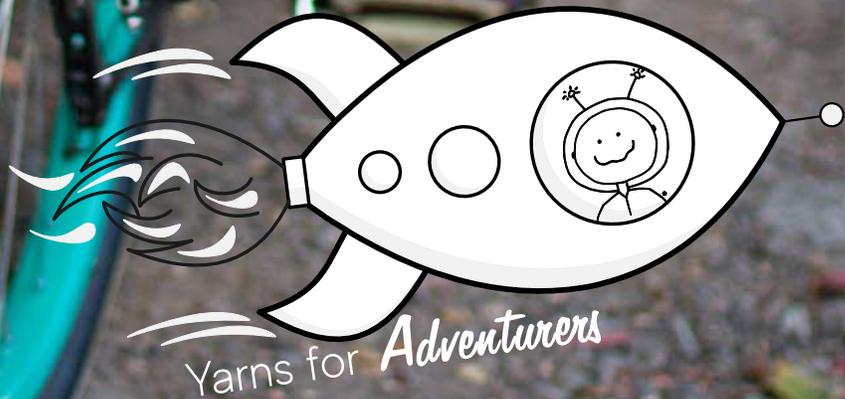
For the most part, colour repeats apply to variegated and tonal yarns more than semi-solids, because they contain multiple colours with distinct changes. But where this does apply to semi-solid skeins is in the variation of the depth of shade – the yarn will have taken the colour more intensely in some sections of the loop than in others. Think of those as colour repeats and you'll get a better understanding of your semi-solid too.

There are several types of colour repeats that you're looking for: long repeats, short repeats, and pops of colour. So open up your skein of hand-dyed yarn, lay it out so you can view the whole loop, and let's see what we've got!





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## Long Repeats

There's no objective measure of what qualifies as a long repeat, but I'd say **anything that is a third of the loop or longer** counts. Long repeats often stretch to one whole side of the skein (so, covering half the yarn) or sometimes even as much as three-quarters or more. A skein can have a single long repeat of just one colour, or it may have several colours that each are long repeats, and those can also be intermixed with short repeats as well. Take a look at this skein in our colourway "Amnesty". The grey is definitely a long repeat, and the blue, while shorter, is on the cusp of being a long repeat itself.



(colourway: Amnesty)

**The longer the repeat, the more it will stretch out in your knitting, forming a long line of colour.** Depending on the width of the item you're making, that could begin to look like stripes, either where the colour stacks row on row, or where



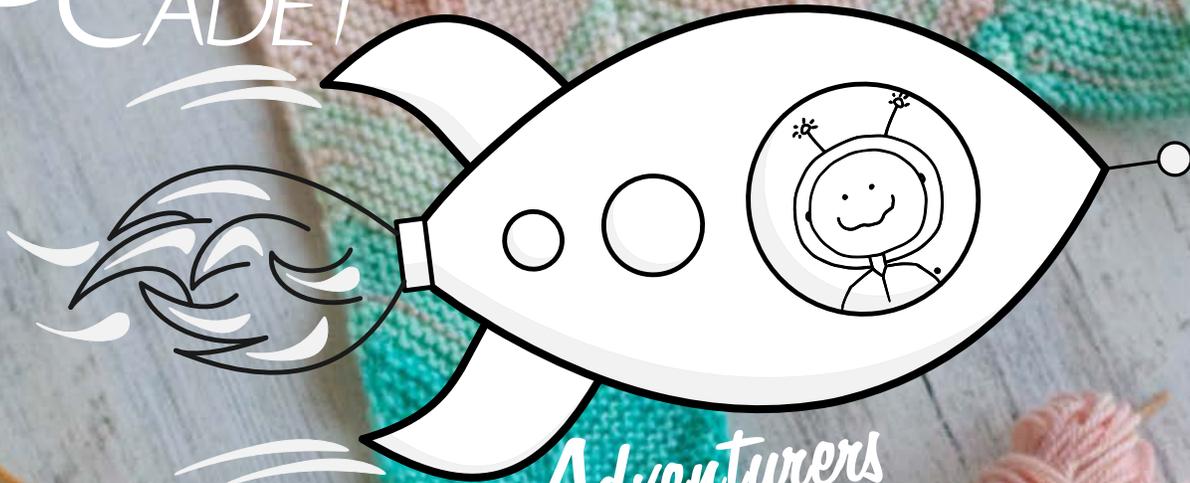
Knit in a yarn with very long colour repeats, notice how the two colours begin to pool into something resembling interesting off-set stripes! (colourway: Zazzle)

it pools more on one side than the other. This shrug here, in Zazzle, is a great example.

But here's something interesting – do you see how the “striping” seems to disappear in the lace panel running down the center? **Where plain stitches like stockinette allow longer repeats to stretch out, patterns that contain more complicated stitches such as yarn overs and slipped stitches break up those longer colours and can help to even them out.**

Crochet does very different things with variegated yarns and their colour repeats, because crochet moves the yarn both vertically as well as horizontally. So while it won't necessarily stretch the colour out the way knitting can, the rule still applies that the longer the repeat, the larger that section of colour will be within the stitch pattern.

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Gradient minis from the  
SpaceCadet's Mini-Skein Club

## Short Repeats

Again, there's no one measure of what qualifies as a short repeat, but I'd call **any colour section that stretches for less than a quarter of a skein's loop as a short repeat**. Sometimes those smaller sections appear evenly across the whole skein, as in our colourway "Blood Moon", and sometimes they appear only here and there, like the green in the colourway "Vortex" that you saw earlier. Sometimes they blend gently into the next colour, and sometimes they have clearer edges.



In this colourway, the short colour repeats are evenly distributed across the skein (colourway: Blood Moon)



Pattern: Pau Hana by Mel Schoenwether, knit in (top to bottom): Headstrong, Honey, Molten Cool, and Dark Skies.

But regardless of how they're laid out, **colour in a short repeat is not going to last long across your stitches before it switches again to the next colour.** When those changes happen evenly or frequently, the resulting fabric often comes out with watercolour-y effect. When the colour appears just a few times in a skein, the result can be either pops of a contrasting colour or, as with the orange section of our colourway "Headstrong" in the sweater above, it can give a heathered effect.

# Pops of Colour

When you have really small sections of colour in a skein, these are what I think of as “pops”. In truth, they’re just short colour repeats like the ones above, but they’re much, much smaller, meaning **the colour won’t last more than a few stitches** when you work it up. Whether they’re in a contrasting colour or a coordinating shade, the effect can be spectacular.

Look back to the picture of our colourway “Vortex” and check out the little section of magenta – that is a great example of a pop of colour. **Colour pops like these can make your stitches super-interesting and your final project really eye-catching.**

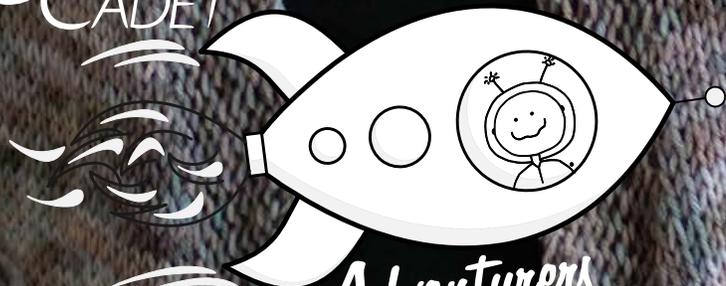
When the colourway is made up almost entirely of small sections of colour, as in “Nine Stones” below, it creates a mottled effect that mimics Pointillism, blending together when viewed from a distance and showing off its individual colours up close.



*These very short colour repeats in grey, brown, and light blue, create a beautiful dappled colour effect that changes constantly on the needles (colourway: Nine Stones)*



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Pattern: Rey's Cardigan by  
Jessica Anderson, knit in  
SpaceCadet® Oriana in the  
colourway "Nine Stones"

## On Your Way To *Reading Your Skein!*

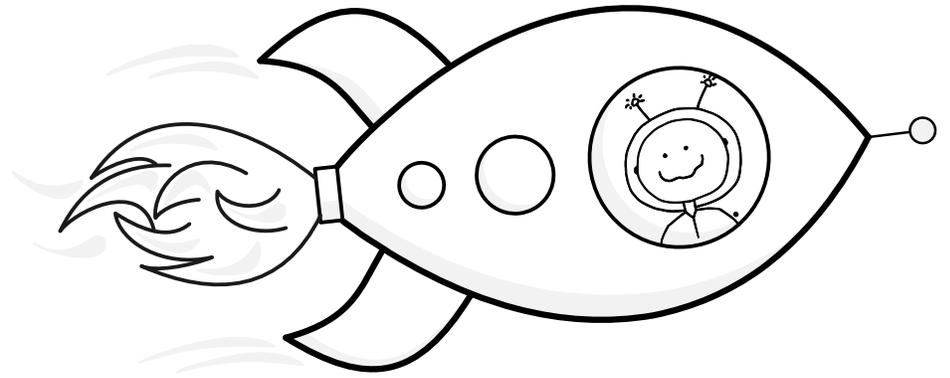
**Now it's your turn!** Go grab a skein from your stash, open it up, and look specifically at the length of the repeats. Does it have a few predominant shades that span most of the skein? Or are there lots of short bursts of colour? Do you see little pops? Twist it up a few different ways, or even bunch it up, and see if that changes the way the colours present themselves.

Being able to look at your skein and identify the colour repeats is such a help to understanding how the colourway will work in your knitting and crocheting! Whether they are long repeats, short repeats, pops of colour, or a combination of all three, each hand-dyed skein is unique and the only way to understand it is... to open it up and see what you've got!



# We dye yarns for *Adventurers!*

At SpaceCadet, we make yarns for knitters and crocheters who love colour and approach each



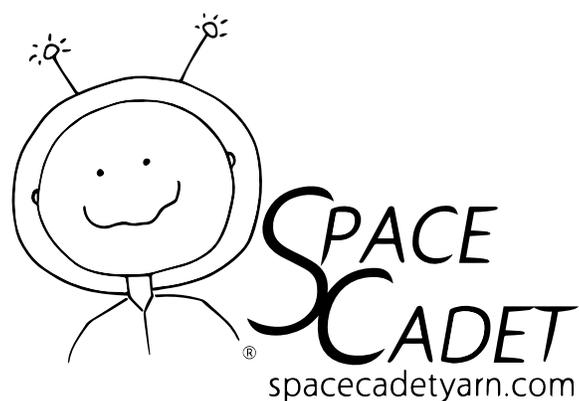
project as an exploration of their creativity. For us, dyeing is a cosmic adventure, one where we get to **share our love of colour with customers and club members like you**, who turn our yarns into adventures of their own!

*...dyeing only from primary colours and mixing every batch by hand...*

And we do that by dyeing only from primary colours -- there are literally just five dyes in our studio: cyan, magenta, yellow, red, and black -- and mixing every batch of every colourway by hand. For our clubs alone, **we create 144 unique new colourways each year**, plus *many* more for our Limited Editions, Small Batches, and new standards.



Most of all, we passionately believe that knitting and crocheting just makes people happier – deep down inside – and nothing does that more than working with gorgeous, vibrant yarn. And if that sounds like your definition of happiness too, then we'd love you to **jump on board and join us on this exciting colour adventure!**



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