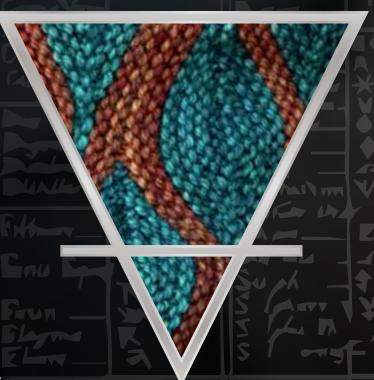


ELEMENTAL

FIVE FABRIC-BENDING SHORT ROW HATS FROM WOOLLY WORMHEAD



INCLUDES PROVISIONAL CAST-ON, SHORT ROW & GRAFTING TUTORIALS

CONTENTS

DISCOVER

Provisional Cast-On.....	p1
German Short Rows in Garter Stitch.....	p2
Grafting Garter Stitch aka Kitchener Stitch.....	p4
Grafting German Short Rows in Garter Stitch	p6
Grafting Across a Colour Change in Garter Stitch	p8

CREATE

AIR – Opal	p10
WATER – Katara.....	p13
FIRE – Azula	p16
EARTH – Toph.....	p19
BALANCE – Korra.....	p22

ABBREVIATIONS AND PANEL MAP SYMBOLS

K:		knit
	>	knit on the WS
	<	knit on the RS
RS:		right side
WS:		wrong side
st(s):		stitch(es)
SR:	∞	Perform short row. For the w&t method, this is the stitch that is wrapped. For the German Short Row (GSR) method, this is the double legged stitch.



AIR
OPAL



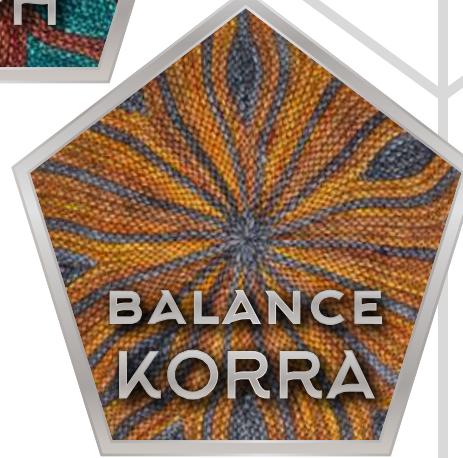
WATER
KATARA



FIRE
AZULA



EARTH
TOPH



BALANCE
KORRA



TUTORIAL

PROVISIONAL CAST-ON

If you are knitting a sideways constructed Hat, and wish for a professional seam-free finish, then this is the cast-on for you. Working hand in hand with Kitchener stitch, this cast-on method allows you to cast-on with 'false' stitches, that are later removed and grafted.

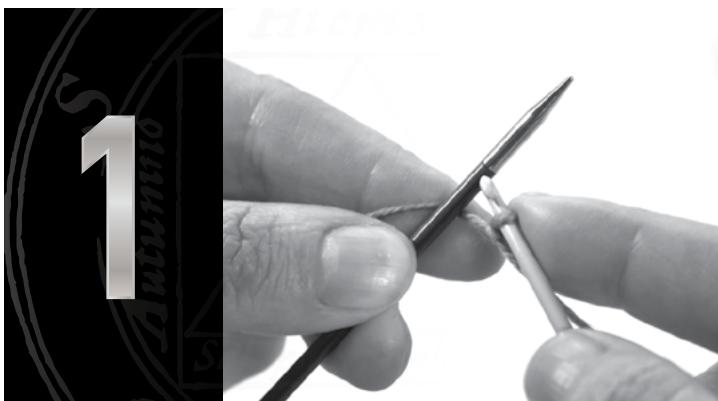
The chain crochet Provisional Cast-On is fairly well known, yet the method of working it directly onto the needle isn't so much – trying to find the right bump along a crocheted chain to pick up as a stitch can be difficult, and if the wrong bump is picked up the Provisional Cast-On isn't as easily removed. Crocheting the stitches directly onto the needle, as demonstrated here, saves a lot of time and effort!

Once you have finished the body of your knitting, this cast-on is easily removed, although it is advisable to remove the chain stitch by stitch, to avoid dropping any stitches.

To do this Provisional Cast-On, you will need a crochet hook and some waste yarn. The amount of yarn needed will vary depending on your project but for most Woolly Wormhead sideways Hats, 2yd/2m is plenty.

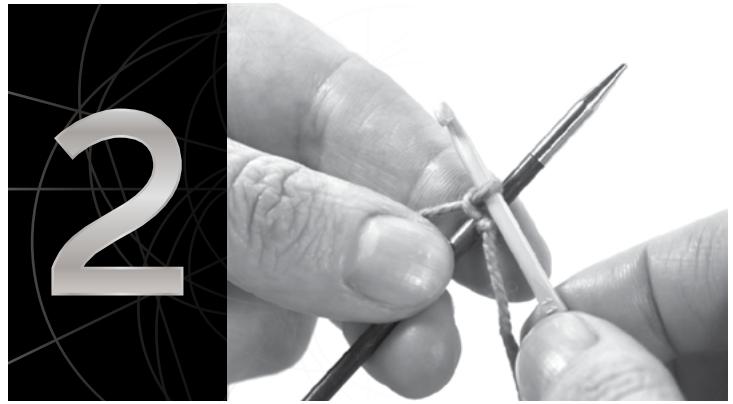
When choosing your waste yarn, use something that isn't fuzzy, something without grip. A wool yarn may well start to felt with the handling and it can be difficult to remove. Cotton or other smooth yarns are best for this job.

The crochet hook should be the same size as the needles you will use, or one a little larger as it will help make the chain easier to remove at the end. Same goes for the waste yarn – use one the same gauge, or slightly heavier, than the yarn you will be using in your knitting.



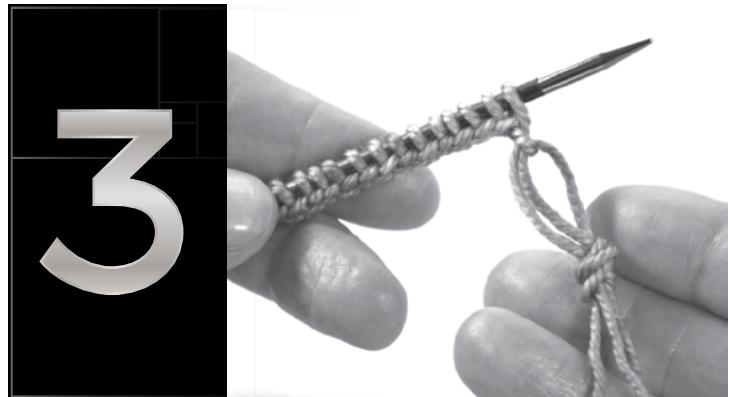
Using your waste yarn, make a slip-knot and slip it onto your crochet hook.

Hold the hook in front of the needle, taking the waste yarn behind the needle. With the hook catch the working yarn at the front.



Pull the yarn through loop on the hook – this will form your 1st stitch. Take your yarn back behind the needle, leaving the loop on your hook. Then repeat what you did in step 1, by taking your hook across the front of the needle to make the next stitch.

Repeat these 2 steps until you have the required number of stitches.



Once you have the right number of stitches, pull the remaining loop on the crochet hook until it becomes very large, tie a knot in it and then break your yarn.



Your Provisional Cast-On is now complete and you are ready to knit! This is how the cast-on looks after a few rows of knitting.

When you have finished the body of knitting and wish to remove the Provisional Cast-On, carefully undo the knot in the waste yarn and start to remove the chain. Don't rip the chain out quickly – you could lose or drop stitches – so it is best to remove them carefully, one by one.

If the stitches around the Provisional Cast-On are complex and it's difficult to see where to insert your needle to grab the stitch, gently stretch the chain and the knitting in different directions and the loop of the stitch you need to pick up will be more visible.

If there is any instance when you need to cast-off then cast-on again in a piece of knitting, this cast-on method works perfectly as it mirrors a regular cast-off very nicely.

Instead of using waste yarn, you will use your working yarn. The slip knot you would normally create to start the Provisional Cast-On will be replaced as the last stitch knitted before the cast-on commences – slip this knitted stitch onto the crochet hook and work as above.

When you have cast-on enough stitches less one, slip the stitch on the hook back onto the needle and your cast-on section is now ready. This method works particularly well when you need to cast-on mid-row.



TUTORIAL

GERMAN SHORT ROWS IN GARTER STITCH

This method of short rows has grown in popularity in recent years, and many knitters prefer this method over others. As with all approaches to a particular construction technique, not everyone achieves the same results, and short rows are no exception.

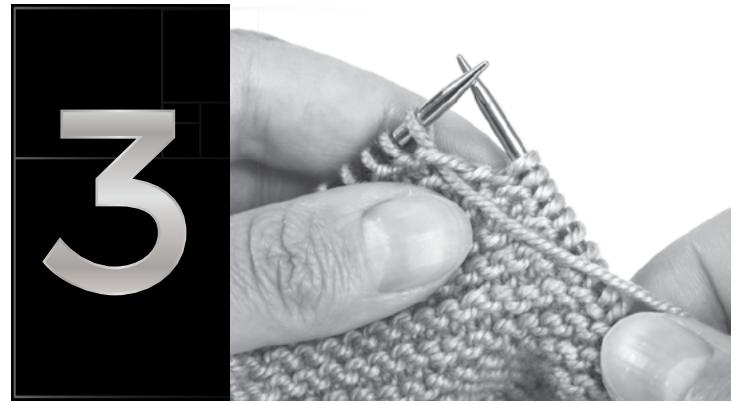
It's worthwhile to explore a few methods and see which ones give you the best results. Gauge is very much an issue when it comes to short row methods, and whether or not you are working flat, whether the short row is on a purl or knit row, or whether the short rows are being worked in the round – and in this last case, often a combination of short row methods works best.



Work the number of stitches specified in the pattern, and then you will be performing the short row on the next stitch.



Knit the short row stitch. With this method, the stitch I refer to as the 'short row stitch' is the same as the stitch that would be wrapped in the wrap and turn method.



Turn your work, so that the short row stitch is the 1st stitch on the left hand needle.



Slip this stitch purlwise to the right hand needle (this action can also be performed before you turn the work).

5



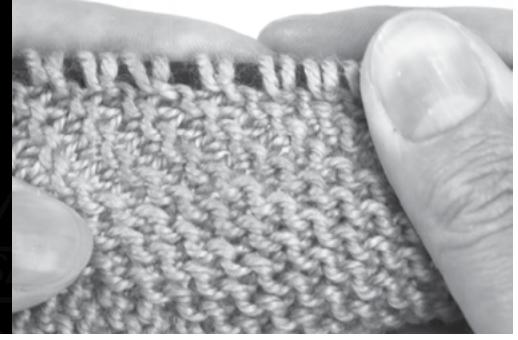
Take your yarn up and across the back, and pull it very tightly – you will then see two 'legs' of the short row stitch on the needle. What you have done here is stretch the stitch underneath the short row stitch right around the needle.

6



Continue pulling the yarn until the 'legs' wrap all the way around the needle, and the yarn is in the correct place to work a knit stitch.

8



Once all the short rows have been worked, they will look like this – each short row stitch has two 'legs'.

WORKING ACROSS THE SHORT ROW

Once you've created your short rows, you'll need to work across them all to close them and give your work a neat finish. Compared to working the wrap and turn method this part is much quicker and easier than picking up the wrap.

9



Knit as instructed until you reach your 1st short row stitch.

7



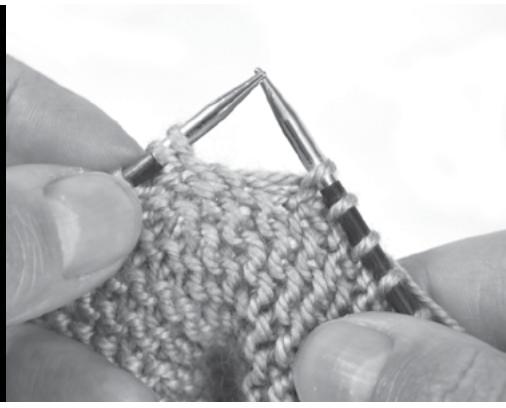
It's important to maintain the tightness of this manoeuvre before knitting back across the stitches to the end of the row.

10



Insert your needle under both legs of the short row stitch as shown – you will knit these together.

11



Continue to do this with all the short row stitches.

12



This is how all of the short rows look from the front.

13



And this is how all the short rows look from the back.

Compared to the wrap and turn method, the front of the work is very neat with tightly worked stitches, and there's a more visible ridge across the back.

If you are working your short rows consecutively, i.e. such as the crown on a sideways knit Hat, then your short rows will consistently be on the same side of your work.

However, if you also have short rows at the brim of a sideways knit Hat, then the back side of this method will appear on the right side of your work. For one or two stitches this will likely not be noticeable, especially in Garter Stitch, but it's important to be aware of this difference.

When you are working a lot of consecutive short rows in Garter Stitch to create a multi-directional fabric, such as with the Hats in Elemental, German Short Rows would be recommended as they are far easier to manage than other methods.



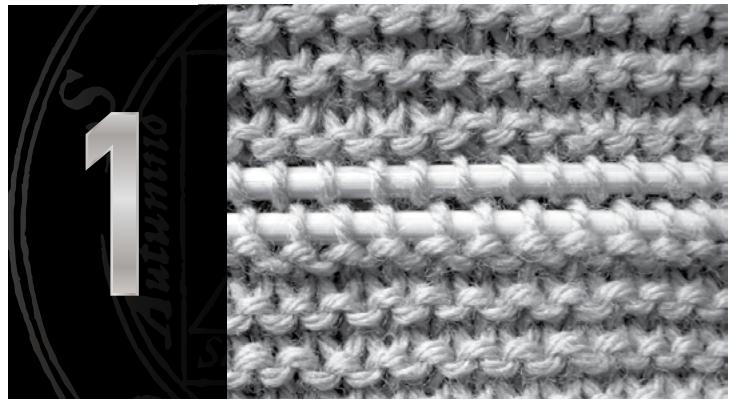
TUTORIAL

GRAFTING GARTER STITCH AKA KITCHENER STITCH

To ensure your graft works correctly, you need to set your stitches up correctly. Unlike grafting stocking stitch, you cannot just bring the edges together, they need to be set up in a particular way. As you look at the needles from the top as shown in step 1, one side should have the ridges right up to the needle and the other should have the ridges sitting away from the needle. If your ridges are the other way around then you'll want to reverse the instructions (this would be known as 'ridge low' grafting). If both needles are the same, you'll want to unpick one side – this is especially important to remember if you're folding a piece in half to graft – in this case, knit half the row before folding.

When we graft, we begin on the front needle and then move to the back needle. It's quite important to remember to stop after step 6 should you need to have a break or tighten up the slack, so that you can start again at a convenient point. Whenever I teach this technique, the most common problem that occurs is stopping midway through the process which causes confusion for the knitter.

PREPARING FOR THE GRAFT



For this graft known as 'ridge high', the front needle (shown here as the bottom needle) has the ridges high, the back needle (shown here as the top needle) has them low - right sides of work showing.

GRAFTING THE SELVEDGE STITCHES

2



In most cases when you come to graft Garter Stitch, the released stitches will be on the back needle, and the yarn will be attached to the front needle.

1



Selvedge stitch 1, front needle: Insert the needle purlwise, pull the yarn through then slip the stitch off the needle.

3



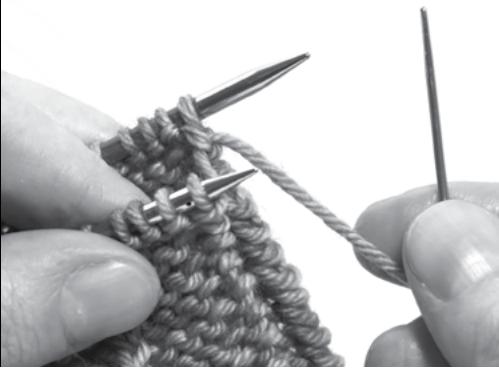
Insert your needle into an inside ridge very close to the 1st stitch on the back needle

2



Selvedge stitch 2, back needle: Insert the needle purlwise, pull the yarn through then slip the stitch off the needle.

4



Pull your yarn through, and the yarn is now ready to come to the front needle to start the graft.

GRAFTING THE REST OF THE STITCHES

3



Stitch 1, front needle: Insert the needle knitwise, pull the yarn through then slip the stitch off the needle.

4



Stitch 2, front needle: Insert the needle purlwise, pull the yarn through but leave the stitch on the needle.

OTHER HELPFUL TIPS TO ENSURE YOUR GRAFT GOES SMOOTHLY

Try to take up the slack (i.e. tighten your stitches) every 5 or 10 stitches. Leaving this until the end will likely cause problems with your tension and cause the graft to look uneven. When taking up the slack, do it slowly, stitch by stitch – don't try pulling from the end as this will tighten some stitches and not others and may even cause your yarn to break!

Always remember to start on the front needle. If your working yarn is on the front needle, slip it through the base of the 1st stitch on the back needle, to ensure it connects correctly when starting the graft.

A quick way to remember the Garter Stitch grafting method is this:

(Front): knit off, purl on.
(Back): knit off, purl on.

5



Stitch 3, back needle: Insert the needle knitwise, pull the yarn through then slip the stitch off the needle.



TUTORIAL

GRAFTING GERMAN SHORT ROWS IN GARTER STITCH

Grafting across German Short Rows is easier than you may think; it's certainly easier than grafting across short rows created by the wrap and turn method!

To ensure your graft works correctly, you need to set your stitches up correctly. The Grafting Garter Stitch tutorial tells you everything you need to know about setting up for the graft.

When we graft, we begin on the front needle and then move to the back needle. It's quite important to remember to stop after step 4 should you need to have a break or tighten up the slack, so that you can start again at a convenient point. Whenever I teach this technique, the most common problem that occurs is stopping mid way through the 4-step process which causes confusion for the knitter.

To start the graft and create the beginning selvedge edge, work steps 2 & 4 once. Then work steps 1 to 4 until all stitches have been grafted, then finish with steps 1 & 3.

6



Stitch 4, back needle: Insert the needle purlwise, pull the yarn through but leave the stitch on the needle. Repeat steps 3 to 6 for the grafting method. You'll also notice that what you do on the front needle you also do on the back needle. To close the graft, work steps 3 & 5 – this creates the final selvedge.

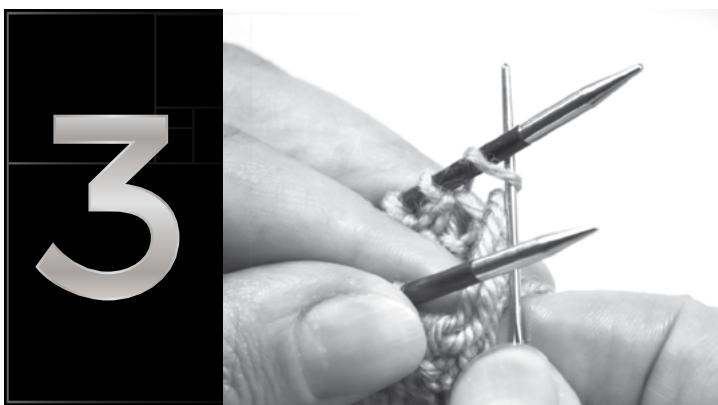


For this graft, known as 'ridge high', the front needle has the ridges high, the back needle has them low – right sides of work facing outwards.

Stitch 1, front needle: Insert the needle knitwise under both 'legs' of the short row stitch, pull the yarn through then slip the stitch off the needle. Just as you treat the 'legs' as one stitch when you knit across them, you do in grafting.



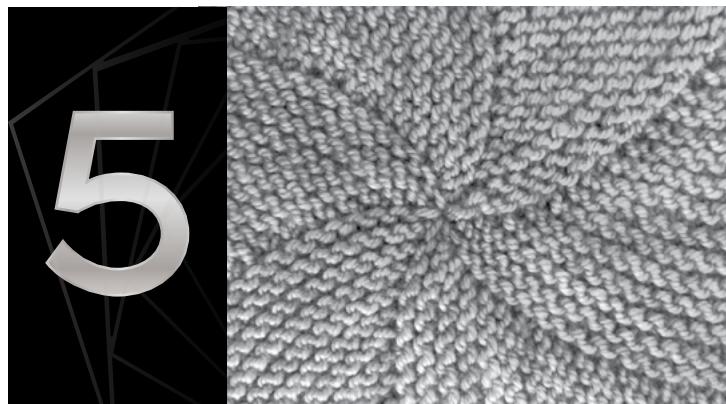
Stitch 2, front needle: Insert the needle purlwise under both 'legs' of the short row stitch, pull the yarn through but leave the stitch on the needle.



Stitch 3, back needle: Insert the needle knitwise, pull the yarn through then slip the stitch off the needle.



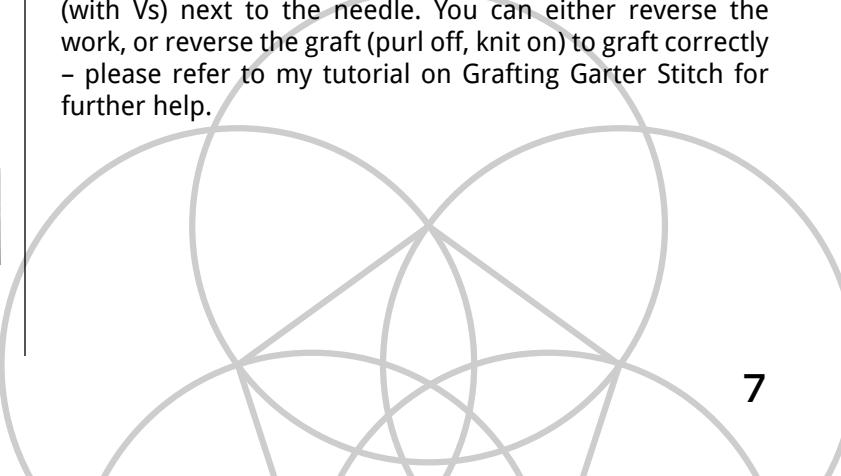
Stitch 4, back needle: Insert the needle purl-wise, pull the yarn through but leave the stitch on the needle. Repeat steps 1 to 4 for the grafting method. You'll also notice that what you do on the front needle you also do on the back needle.



Finished graft after slack has been taken up, viewed from the right side of the work.

This graft assumes that your short row stitches in need of grafting are held on the front needle – if they are on the back, it might be worthwhile to flip the work around/inside out, and put the short row stitches at the front – they'll be easier to see and you're less likely to make a mistake with your grafting.

Also, this set up is for what I refer to as ridge high –i.e. as the needles face you, the ridges will be high (next to the needle) at the front, and on the back the ridges will be low (with Vs) next to the needle. You can either reverse the work, or reverse the graft (purl off, knit on) to graft correctly – please refer to my tutorial on Grafting Garter Stitch for further help.





TUTORIAL

GRAFTING ACROSS A COLOUR CHANGE IN GARTER STITCH

The key to a successful graft is in the preparation, and ensuring that you have the correct number of stitches in each yarn or colour segment before starting the graft.



As you remove the Provisional Cast-On, you will notice that you are one stitch short on the released stitches. In this example, the section that is one stitch short is shown in the lighter coloured yarn.

The usual advice would be to make up that extra stitch at the edge of the work, i.e. at the crown edge of a sideways knit Hat, but when we are grafting across two colours we need to ensure that the missing stitch is replaced in the right section.



If you look at the stitches after they've been released, you will notice an extra loop next to where the yarn changed colour – this should be in the yarn that has the missing stitch. Insert your needle into the loop from front to back, to ensure the new stitch has the same orientation as the others. At this point you will also have the yarn tail of the darker coloured yarn – where this sits depends on whether you joined the new yarn on a right side or wrong side row, but you'll want to slip it through the loop so that it sits at the front of the work as shown.



Then take the yarn towards the back, to the right of the loop – this is done to make your new stitch look the same as all the other stitches from the right side of the work.



Once all of the stitches are on the needle together, you are ready to graft. In this example the stitches that have been released will be on the back needle, and the graft will start with the lighter coloured yarn.

5



Work a regular Garter Stitch graft across the stitches until you reach the point of having only one stitch remaining in the lighter yarn. Insert your needle knitwise and slip the stitch off the needle – this is the 1st stitch of the graft, which is shown as step 3 in the Grafting Garter Stitch tutorial.

6



Then, using the same yarn and needle, insert your needle knitwise into the stitch on the back needle and slip it off – this is the step 5 of the garter graft, the 3rd stitch. What you are essentially doing is working to close the graft of the lighter yarn, as you would when you come to the end of a graft on a flat piece of knitting.

7



Now change to the darker yarn, and we will treat this as you would when you are starting the graft at the beginning – by working the 2nd stitch (step 4) of the graft. Insert your needle purlwise into the next stitch, pull the yarn through, leaving the stitch on the needle.

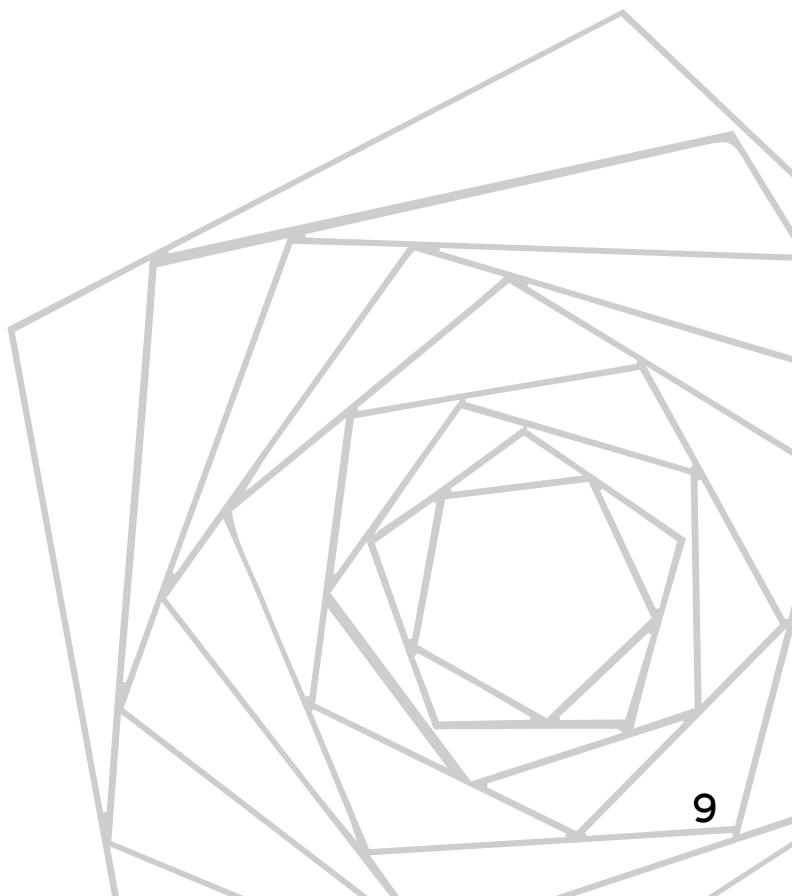
8



Insert the needle purlwise into the 1st stitch on the back needle, pull the yarn through leaving the stitch on the needle – this is step 6 of the graft, the 4th stitch. You will now return to step 3 of the graft on the 1st stitch on the front needle, and continue grafting across the remaining stitches with the regular Garter Stitch graft.

This method of changing yarns is quite simple in practice – you simply perform the finishing steps on the final stitches of the lighter yarn, then restart the graft with the new yarn – that principle can be applied to Stocking Stitch and other stitches. As long as the preparation is done – making up for the missing stitch at the correct point – the graft will be jogless across the yarn changes.

As well as using this method for a change in colour of yarn, it can also be used for a change in thickness or texture of yarn, too. You can perform this graft across as many colour changes as necessary, allowing you to create a perfectly invisible seam across fairisle or stranded work (there will always only be one colour section which has one stitch short, so you will only need to perform the preparation once).





AIR
OPAL

YARN

- Yarn A: 213yd/194m; Yarn B: 31yd/28m
- 61yd/56m for a 6x6in/15x15cm swatch in Garter St
- DK weight, plied yarn

NEEDLES & NOTIONS

- Pair 3.25mm [3.5mm] straight needles or size needed to obtain gauge
- 3.25mm crochet hook
- Approx. 3yd/3m waste yarn
- Tapestry needle

SAMPLE DETAILS

Shown in The Yarn Collective Bloomsbury DK in shades Soot (A) & Sand (B) [263yd/240m per 100g; 100% Merino].

Shown in size 20in/50.75cm on model with 19.5in/49.5cm circumference head.

SIZE & GAUGE

Sizing in this pattern is achieved through gauge. The sideways nature of this design creates a great deal of stretch, so do consider the negative ease.

To fit size: 20in/50.75cm; use 3.25mm needles

Gauge: 24 sts x 48 rows to 4in/10cm over Garter St

Finished Circumference: 16.25in/41.5cm

Finished Length: 9.25in/23.75cm

To fit size: 22in/56cm; use 3.5mm needles

Gauge: 22 sts x 44 rows to 4in/10cm over Garter St

Finished Circumference: 17.75in/45.25cm

Finished Length: 10.25in/25.75cm

NOTE

With this pattern, row gauge is the important factor as this affects the fit around the body, and the stitch gauge affects the depth of the Hat.

The pattern is constructed of panels which are worked consecutively, and each panel starts on a wrong side row. You will work the panel 7 times in total.

Yarn A is used for the background colour, Yarn B for the lines. You will occasionally need to carry Yarn B across the back of the work – technically upwards, between rows, and to help keep an even tension and avoid snags the yarn can be held behind Yarn A. To change colours simply swap the yarns over on the wrong side of the work, ensuring that the yarns cross to avoid holes where the colours change.

The recommended short row method is German Short Rows, as they are easy to manage within Garter Stitch, are double sided and are easily graftable (you simply treat the double stitch as a normal stitch, just as you do when knitting over them). You can of course use any short row method, but do consider how it looks from both sides (as the short rows traverse) and how easy they are to graft (there are only a few short rowed stitches that will require grafting to finish the Hat).

HOW TO

Using waste yarn and Provisional Cast-On method, cast on 56 sts. Change to main yarn and starting with Yarn A, work panel as directed in the map.

Repeat these 60 rows 7 times in total. On the final repeat, omit Row 60 as that will be replaced by the grafting.

FINISHING

Carefully remove Provisional Cast-On stitch by stitch, taking care to keep in pattern, transferring live stitches to 2nd needle. You'll graft with the working yarn; cut the working yarn leaving a 1yd/1m tail.

Bring both sets of stitches together and graft across all the stitches. When grafting across short rows, you will treat the short rows in exactly the same way as you have throughout the pattern.

To create a clean graft in Garter Stitch, you need to bring an odd number of rows together, hence the final row on the final panel isn't knitted, and will be replaced by the grafting. You will be grafting from the bottom of the Hat up. Once the graft is complete, thread yarn through the edge stitches and pull tight to close the crown.

Weave in all ends and block as required.

PANEL MAP

On the next page is the map for the panel – you will work the panel a total of 7 times. On the final repeat, omit Row 60 as that will be replaced by the grafting.

The stitch counts are included to help you keep track of the short rows more easily – the stitch counts do not include the short row stitches.

Garter Stitch is worked throughout, and the direction of work is indicated as an additional aid to keeping track.

These instructions have been carefully engineered to provide a balanced fabric – i.e. it has the same number of rows throughout the body (brim and crown shaping have been incorporated) and the fabric will lay correctly. Any adjustments or amendments to the placement of the short rows may cause the fabric to distort.

The panel starts on the wrong side of the work, with an odd numbered row, working from crown to brim; brim to crown rows are even numbered rows, with the right side of the work facing.



AIR - OPAL PANEL MAP

>	Yarn A, knit on WS	>	Yarn B, knit on WS
<	Yarn A, knit on RS	<	Yarn B, knit on RS



WATER KATARA

YARN

- Yarn A: 211yd/192m; Yarn B: 43yd/39m
- 61yd/56m for a 6x6in/15x15cm swatch in Garter St
- DK weight, plied yarn

NEEDLES & NOTIONS

- Pair 3.25mm [3.5mm] straight needles or size needed to obtain gauge
- 3.25mm crochet hook
- Approx. 3yd/3m waste yarn
- Tapestry needle

SAMPLE DETAILS

Shown in The Yarn Collective Bloomsbury DK in shades Surf (A) & Sand (B) [263yd/240m per 100g; 100% Merino].

Shown in size 20in/50.75cm on model with 19.5in/49.5cm circumference head.

SIZE & GAUGE

Sizing in this pattern is achieved through gauge. The sideways nature of this design creates a great deal of stretch, so do consider the negative ease.

To fit size: 20in/50.75cm; use 3.25mm needles

Gauge: 24 sts x 48 rows to 4in/10cm over Garter St

Finished Circumference: 16in/40.75cm

Finished Length: 9.25in/23.75cm

To fit size: 22in/56cm; use 3.5mm needles

Gauge: 22 sts x 44 rows to 4in/10cm over Garter St

Finished Circumference: 17.5in/44.25cm

Finished Length: 10.25in/25.75cm

NOTE

With this pattern, row gauge is the important factor as this affects the fit around the body, and the stitch gauge affects the depth of the Hat.

The pattern is constructed of panels which are worked consecutively, and each panel starts on a wrong side row. You will work the panel 8 times in total.

Yarn A is used for the background colour, Yarn B for the lines. You will occasionally need to carry Yarn B across the back of the work – technically upwards, between rows, and to help keep an even tension and avoid snags the yarn can be held behind Yarn A. To change colours simply swap the yarns over on the wrong side of the work, ensuring that the yarns cross to avoid holes where the colours change.

The recommended short row method is German Short Rows, as they are easy to manage within Garter Stitch, are double sided and are easily graftable (you simply treat the double stitch as a normal stitch, just as you do when knitting over them). You can of course use any short row method, but do consider how it looks from both sides (as the short rows traverse) and how easy they are to graft (there are only a few short rowed stitches that will require grafting to finish the Hat).

HOW TO

Using waste yarn and Provisional Cast-On method, cast on 56 sts. Change to main yarn and starting with Yarn A, work panel as directed in the map.

Repeat these 58 rows 8 times in total. On the final repeat, omit Row 58 as that will be replaced by the grafting.

FINISHING

Carefully remove Provisional Cast-On stitch by stitch, taking care to keep in pattern, transferring live stitches to 2nd needle. You'll graft with the working yarn; cut the working yarn leaving a 1yd/1m tail.

Bring both sets of stitches together and graft across all the stitches. When grafting across short rows, you will treat the short rows in exactly the same way as you have throughout the pattern.

To create a clean graft in Garter Stitch, you need to bring an odd number of rows together, hence the final row on the final panel isn't knitted, and will be replaced by the grafting. You will be grafting from the bottom of the Hat up. Once the graft is complete, thread yarn through the edge stitches and pull tight to close the crown.

Weave in all ends and block as required.

PANEL MAP

On the next page is the map for the panel – you will work the panel a total of 8 times. On the final repeat, omit Row 58 as that will be replaced by the grafting.

The stitch counts are included to help you keep track of the short rows more easily – the stitch counts do not include the short row stitches.

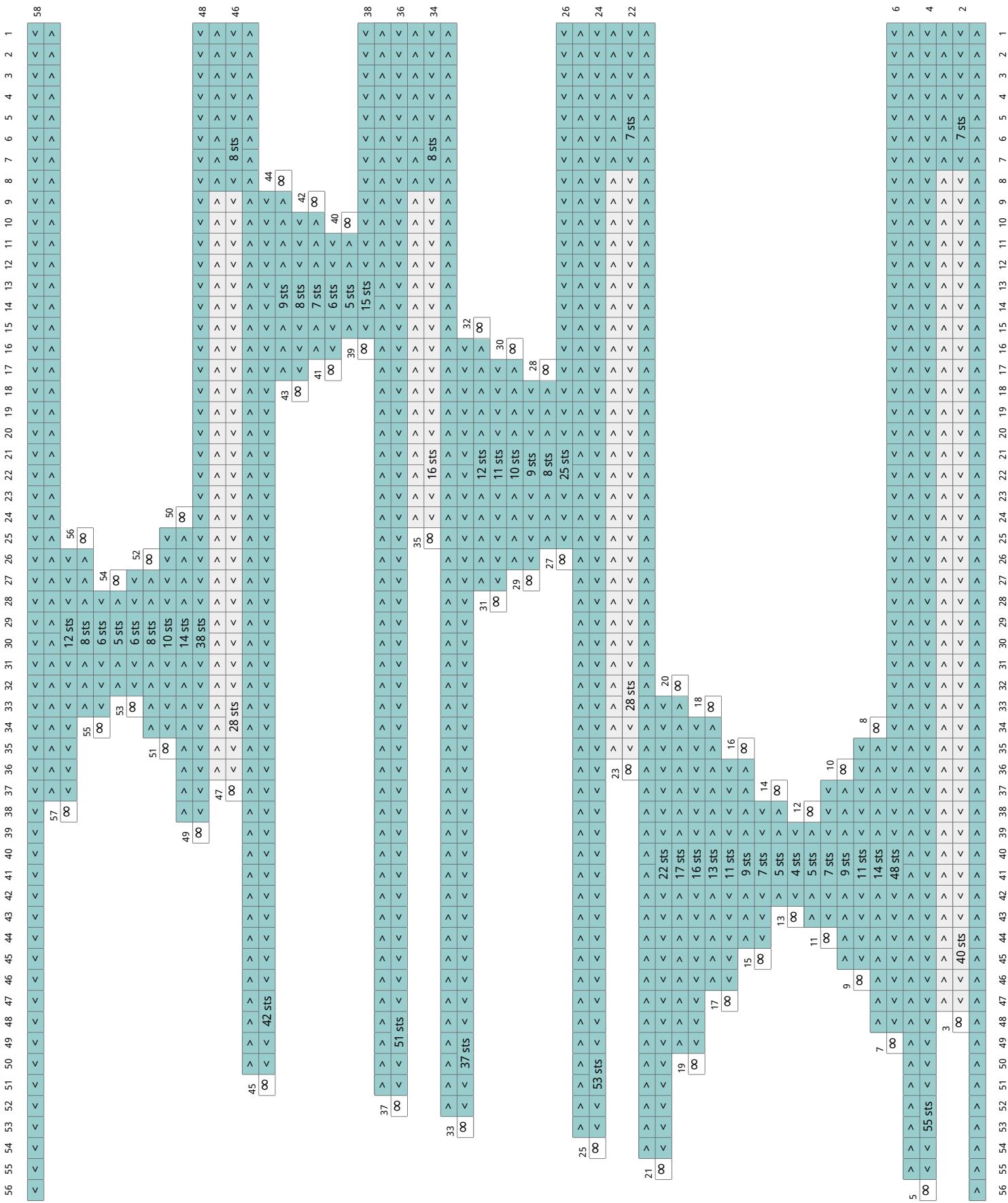
Garter Stitch is worked throughout, and the direction of work is indicated as an additional aid to keeping track.

These instructions have been carefully engineered to provide a balanced fabric – i.e. it has the same number of rows throughout the body (brim and crown shaping have been incorporated) and the fabric will lay correctly. Any adjustments or amendments to the placement of the short rows may cause the fabric to distort.

The panel starts on the wrong side of the work, with an odd numbered row, working from crown to brim; brim to crown rows are even numbered rows, with the right side of the work facing.



WATER - KATARA PANEL MAP





FIRE AZULA

YARN

- Yarn A: 105yd/95m; Yarn B: 158yd/144m
- 61yd/56m for a 6x6in/15x15cm swatch in Garter St
- DK weight, plied yarn

NEEDLES & NOTIONS

- Pair 3.25mm [3.5mm] straight needles or size needed to obtain gauge
- 3.25mm crochet hook
- Approx. 3yd/3m waste yarn
- Tapestry needle

SAMPLE DETAILS

Shown in The Yarn Collective Bloomsbury DK in shades Copper (A) & Russet (B) [263yd/240m per 100g; 100% Merino].

Shown in size 20in/50.75cm on model with 19.5in/49.5cm circumference head.

SIZE & GAUGE

Sizing in this pattern is achieved through gauge. The sideways nature of this design creates a great deal of stretch, so do consider the negative ease.

To fit size: 20in/50.75cm; use 3.25mm needles

Gauge: 24 sts x 48 rows to 4in/10cm over Garter St

Finished Circumference: 16in/40.75cm

Finished Length: 8.75in/22.5cm

To fit size: 22in/56cm; use 3.5mm needles

Gauge: 22 sts x 44 rows to 4in/10cm over Garter St

Finished Circumference: 17.5in/44.25cm

Finished Length: 9.75in/24.5cm

NOTE

With this pattern, row gauge is the important factor as this affects the fit around the body, and the stitch gauge affects the depth of the Hat.

The pattern is constructed of panels which are worked consecutively, and each panel starts on a wrong side row. You will work the panel 8 times in total.

Yarn A is used for the background colour, Yarn B for the flames. You will occasionally need to carry Yarn B across the back of the work – technically upwards, between rows, and to help keep an even tension and avoid snags the yarn can be held behind Yarn A. To change colours simply swap the yarns over on the wrong side of the work, ensuring that the yarns cross to avoid holes where the colours change.

The recommended short row method is German Short Rows, as they are easy to manage within Garter Stitch, are double sided and are easily graftable (you simply treat the double stitch as a normal stitch, just as you do when knitting over them). You can of course use any short row method, but do consider how it looks from both sides (as the short rows traverse) and how easy they are to graft (there are only a few short rowed stitches that will require grafting to finish the Hat).

HOW TO

Using waste yarn and Provisional Cast-On method, cast on 53 sts. Change to main yarn and starting with Yarn A, work panel as directed in the map.

Repeat these 80 rows 8 times in total. On the final repeat, omit Row 80 as that will be replaced by the grafting.

FINISHING

Carefully remove Provisional Cast-On stitch by stitch, taking care to keep in pattern, transferring live stitches to 2nd needle. You'll graft with the working yarn; cut the working yarn leaving a 1yd/1m tail.

Bring both sets of stitches together and graft across all the stitches. When grafting across short rows, you will treat the short rows in exactly the same way as you have throughout the pattern.

To graft across the colour change between Yarn A and Yarn B, simply work the 1st stitch on each needle with Yarn A, and the 2nd stitch with Yarn B – this effectively closes off the 1st yarn and begins again with the second.

To create a clean graft in Garter Stitch, you need to bring an odd number of rows together, hence the final row on the final panel isn't knitted, and will be replaced by the grafting. You will be grafting from the bottom of the Hat up. Once the graft is complete, thread yarn through the edge stitches and pull tight to close the crown.

Weave in all ends and block as required.

PANEL MAP

On the next page is the map for the panel – you will work the panel a total of 8 times. On the final repeat, omit Row 80 as that will be replaced by the grafting.

The stitch counts are included to help you keep track of the short rows more easily – the stitch counts do not include the short row stitches.

Garter Stitch is worked throughout, and the direction of work is indicated as an additional aid to keeping track.

These instructions have been carefully engineered to provide a balanced fabric – i.e. it has the same number of rows throughout the body (brim and crown shaping have been incorporated) and the fabric will lay correctly. Any adjustments or amendments to the placement of the short rows may cause the fabric to distort.

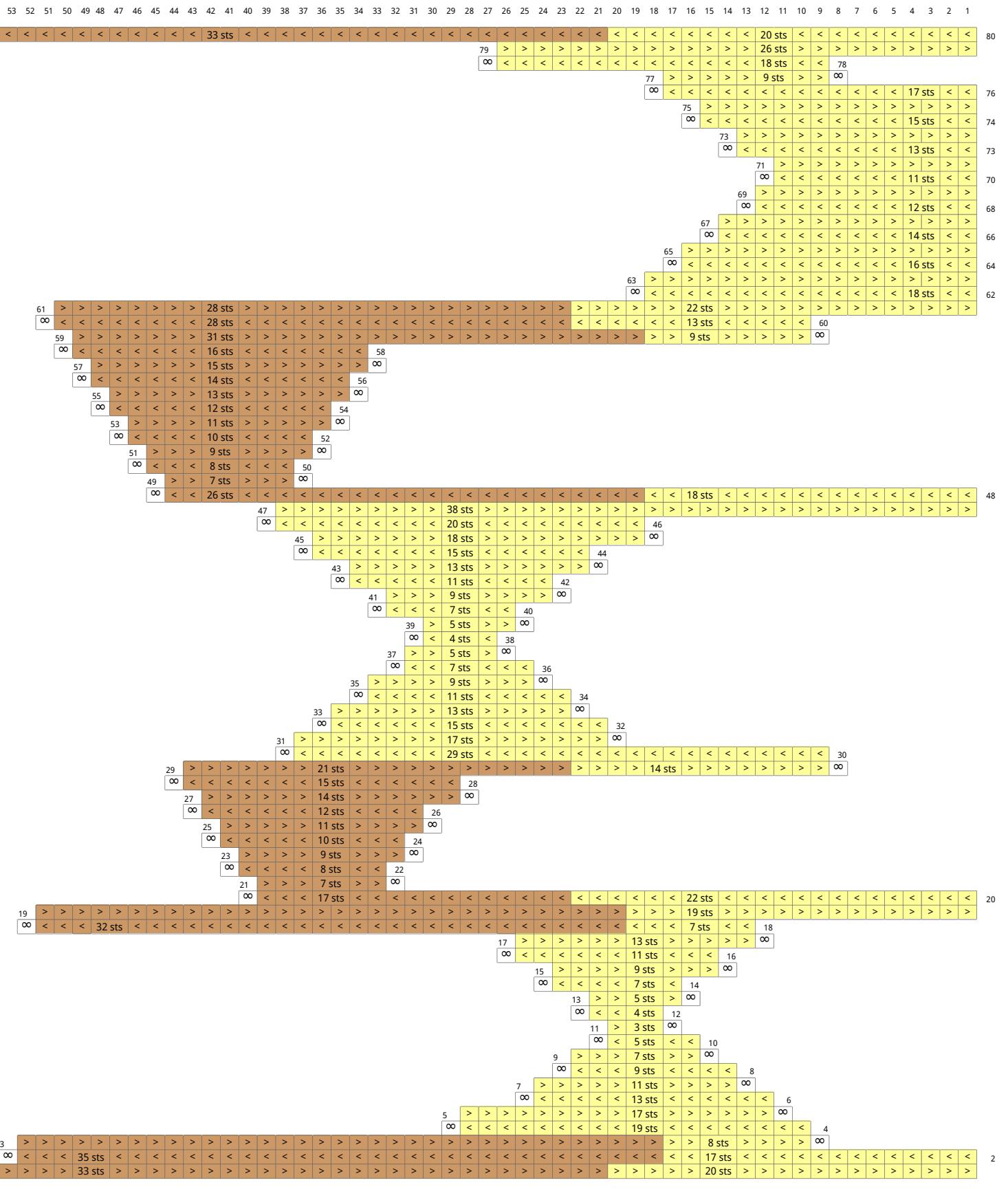
The panel starts on the wrong side of the work, with an odd numbered row, working from crown to brim; brim to crown rows are even numbered rows, with the right side of the work facing.



FIRE - AZULA PANEL MAP

> Yarn A, knit on WS > Yarn B, knit on WS

< Yarn A, knit on RS < Yarn B, knit on RS





EARTH TOPH

YARN

- Yarn A: 137yd/125m; Yarn B: 112yd/102m
- 61yd/56m for a 6x6in/15x15cm swatch in Garter St
- DK weight, plied yarn

NEEDLES & NOTIONS

- Pair 3.25mm [3.5mm] straight needles or size needed to obtain gauge
- 3.25mm crochet hook
- Approx. 3yd/3m waste yarn
- Tapestry needle

SAMPLE DETAILS

Shown in The Yarn Collective Bloomsbury DK in shades Copper (A) & Oz (B) [263yd/240m per 100g; 100% Merino].

Shown in size 20in/50.75cm on model with 19.5in/49.5cm circumference head.

SIZE & GAUGE

Sizing in this pattern is achieved through gauge. The sideways nature of this design creates a great deal of stretch, so do consider the negative ease.

To fit size: 20in/50.75cm; use 3.25mm needles

Gauge: 24 sts x 48 rows to 4in/10cm over Garter St

Finished Circumference: 16in/40.75cm

Finished Length: 9.25in/23.25cm

To fit size: 22in/56cm; use 3.5mm needles

Gauge: 22 sts x 44 rows to 4in/10cm over Garter St

Finished Circumference: 17.5in/44.25cm

Finished Length: 10in/25.5cm

NOTE

With this pattern, row gauge is the important factor as this affects the fit around the body, and the stitch gauge affects the depth of the Hat.

The pattern is constructed of panels which are worked consecutively, and each panel starts on a wrong side row. You will work the panel 8 times in total.

Yarn A is used for the background colour, Yarn B for the forms. You will occasionally need to carry Yarn B across the back of the work – technically upwards, between rows, and to help keep an even tension and avoid snags the yarn can be held behind Yarn A. To change colours simply swap the yarns over on the wrong side of the work, ensuring that the yarns cross to avoid holes where the colours change.

The recommended short row method is German Short Rows, as they are easy to manage within Garter Stitch, are double sided and are easily graftable (you simply treat the double stitch as a normal stitch, just as you do when knitting over them). You can of course use any short row method, but do consider how it looks from both sides (as the short rows traverse) and how easy they are to graft (there are only a few short rowed stitches that will require grafting to finish the Hat).

HOW TO

Using waste yarn and Provisional Cast-On method, cast on 55 sts. Change to main yarn and starting with Yarn A, work panel as directed in the map.

Repeat these 72 rows 8 times in total. On the final repeat, omit Row 72 as that will be replaced by the grafting.

FINISHING

Carefully remove Provisional Cast-On stitch by stitch, taking care to keep in pattern, transferring live stitches to 2nd needle. You'll graft with the working yarn; cut the working yarn leaving a 1yd/1m tail.

Bring both sets of stitches together and graft across all the stitches. When grafting across short rows, you will treat the short rows in exactly the same way as you have throughout the pattern.

To create a clean graft in Garter Stitch, you need to bring an odd number of rows together, hence the final row on the final panel isn't knitted, and will be replaced by the grafting. You will be grafting from the bottom of the Hat up. Once the graft is complete, thread yarn through the edge stitches and pull tight to close the crown.

Weave in all ends and block as required.

PANEL MAP

On the next page is the map for the panel – you will work the panel a total of 8 times. On the final repeat, omit Row 72 as that will be replaced by the grafting.

The stitch counts are included to help you keep track of the short rows more easily – the stitch counts do not include the short row stitches.

Garter Stitch is worked throughout, and the direction of work is indicated as an additional aid to keeping track.

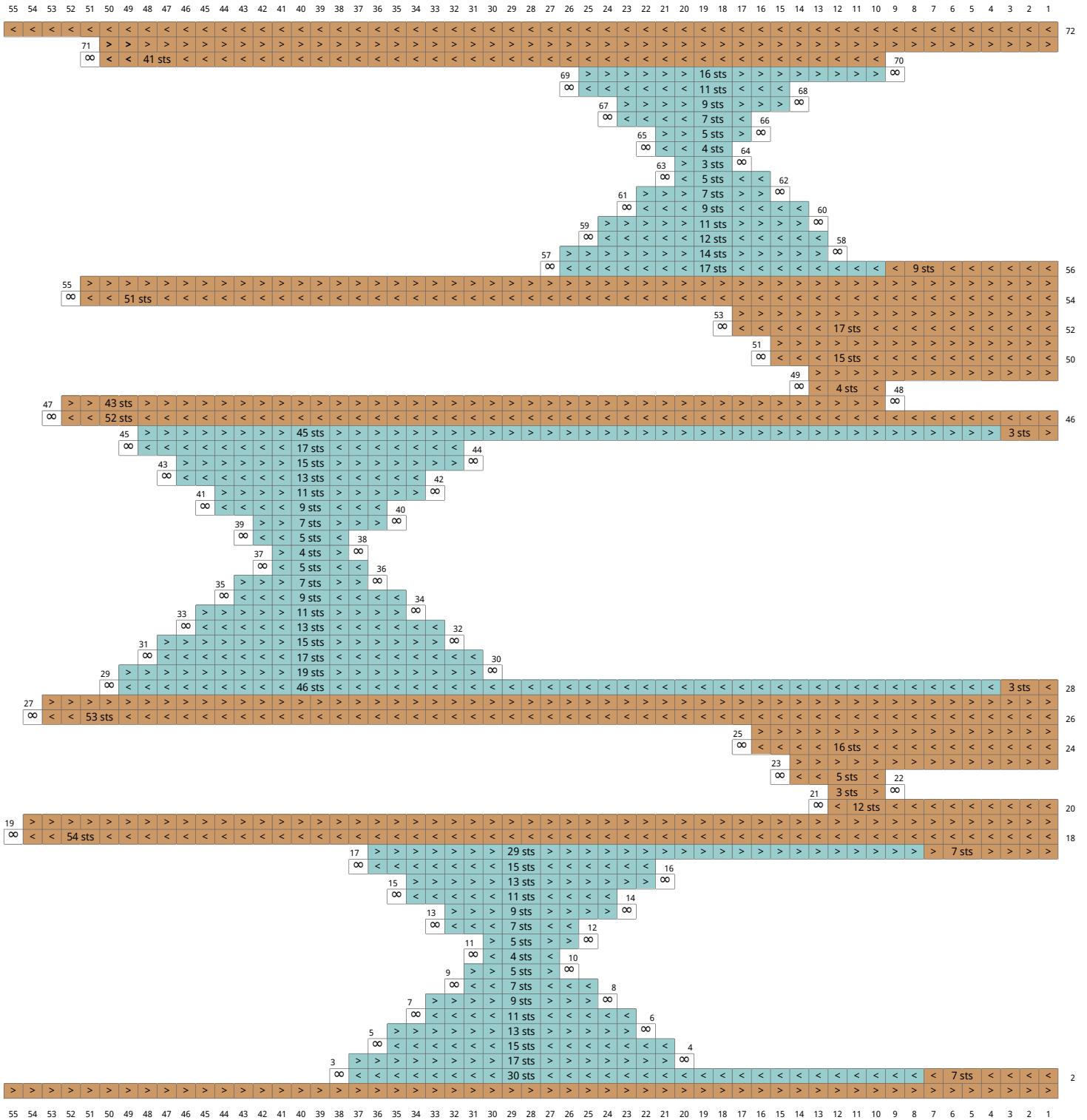
These instructions have been carefully engineered to provide a balanced fabric – i.e. it has the same number of rows throughout the body (brim and crown shaping have been incorporated) and the fabric will lay correctly. Any adjustments or amendments to the placement of the short rows may cause the fabric to distort.

The panel starts on the wrong side of the work, with an odd numbered row, working from crown to brim; brim to crown rows are even numbered rows, with the right side of the work facing.



EARTH - TOPH PANEL MAP

> Yarn A, knit on WS > Yarn B, knit on WS
 < Yarn A, knit on RS < Yarn B, knit on RS





BALANCE KORRA

YARN

- Yarn A: 140yd/128m; Yarn B: 140yd/128
- 61yd/56m for a 6x6in/15x15cm swatch in Garter St
- DK weight, plied yarn

NEEDLES & NOTIONS

- Pair 3.25mm [3.5mm] straight needles or size needed to obtain gauge
- 3.25mm crochet hook
- Approx. 3yd/3m waste yarn
- Tapestry needle

SAMPLE DETAILS

Shown in The Yarn Collective Bloomsbury DK in shades Russet (A) & Soot (B) [263yd/240m per 100g; 100% Merino]. Shown in size 20in/50.75cm on model with 19.5in/49.5cm circumference head.

SIZE & GAUGE

Sizing in this pattern is achieved through gauge. The sideways nature of this design creates a great deal of stretch, so do consider the negative ease.

To fit size: 20in/50.75cm; use 3.25mm needles

Gauge: 24 sts x 48 rows to 4in/10cm over Garter St

Finished Circumference: 15in/38cm

Finished Length: 9.5in/24.25cm

To fit size: 22in/56cm; use 3.5mm needles

Gauge: 22 sts x 44 rows to 4in/10cm over Garter St

Finished Circumference: 16.25in/41.5cm

Finished Length: 10.25in/26.25cm

NOTE

With this pattern, row gauge is the important factor as this affects the fit around the body, and the stitch gauge affects the depth of the Hat.

The pattern is constructed of panels which are worked consecutively, and each panel starts on a wrong side row. You will work the panel 18 times in total.

Yarn A is used for the background colour, Yarn B for the lines. To change colours simply swap the yarns over on the wrong side of the work, ensuring that the yarns cross to avoid holes where the colours change.

The recommended short row method is German Short Rows, as they are easy to manage within Garter Stitch, are double sided and are easily graftable (you simply treat the double stitch as a normal stitch, just as you do when knitting over them). You can of course use any short row method, but do consider how it looks from both sides (as the short rows traverse) and how easy they are to graft (there are only a few short rowed stitches that will require grafting to finish the Hat).

PANEL PLACEMENT

To achieve a balanced fabric, the short row section indicated within the panel map will need to be repositioned for each panel. There are 9 possible positions for the section, and

each position can only be worked twice. A table next to the panel map will help you keep track of panel placement. How you arrange the panels is your choice – the fabric will remain balanced as long as each position is only worked twice.

HOW TO

Using waste yarn and Provisional Cast-On method, cast on 57 sts. Change to main yarn and starting with Yarn A, work panel as directed in the map.

Repeat these 20 rows 18 times in total. On the final repeat, omit Row 20 as that will be replaced by the grafting.

FINISHING

Carefully remove Provisional Cast-On stitch by stitch, taking care to keep in pattern, transferring live stitches to 2nd needle. You'll graft with the working yarn; cut the working yarn leaving a 1yd/1m tail.

Bring both sets of stitches together and graft across all the stitches. When grafting across short rows, you will treat the short rows in exactly the same way as you have throughout the pattern.

To create a clean graft in Garter Stitch, you need to bring an odd number of rows together, hence the final row on the final panel isn't knitted, and will be replaced by the grafting. You will be grafting from the bottom of the Hat up. Once the graft is complete, thread yarn through the edge stitches and pull tight to close the crown.

Weave in all ends and block as required.

PANEL MAP

On the next page is the map for the panel – you will work the panel a total of 18 times. On the final repeat, omit Row 20 as that will be replaced by the grafting.

The short row section in the box will occur at different points throughout the pattern, and is shown in the highest (9th) position. There are 9 possible positions for this section, and each position can only be worked twice to maintain a balanced fabric. The position of each section is determined by the number of stitches worked leading up to the section – e.g to work position 9, knit 47sts from the brim edge on Row 6 then turn; to work position 5, knit 35sts from the brim edge then turn. The table next to the panel map has been provided to help you plan and keep track.

The stitch counts are included to help you keep track of the short rows more easily – the stitch counts do not include the short row stitches.

Garter Stitch is worked throughout, and the direction of work is indicated as an additional aid to keeping track.

These instructions have been carefully engineered to provide a balanced fabric – i.e. it has the same number of rows throughout the body (brim and crown shaping have been incorporated) and the fabric will lay correctly. Any adjustments or amendments to the placement of the short rows may cause the fabric to distort.

The panel starts on the wrong side of the work, with an odd numbered row, working from crown to brim; brim to crown rows are even numbered rows, with the right side of the work facing.

BALANCE – KORRA PANEL MAP

- > Yarn A, knit on WS
- < Yarn A, knit on RS

- > Yarn B, knit on WS
- < Yarn B, knit on RS

Use this table to help keep track of panel placement to create a Korra Hat as shown on page 22.

Panel no. 1 > 9	5	2	7	4	1	8	6	3	9
Panel no. 10 > 18	12	14	10	13	16	11	18	15	17

OR fill in this empty table to create your own Korra Hat!

Point to begin short row section

NONMETALS

MODEL

Beth Freeleaf

PHOTOGRAPHY

Tom Paterson

Woolly Wormhead

LAYOUT DESIGN

Zabet Groznaya

PANEL MAPS AND SCHEMATICS

Woolly Wormhead

TECHNICAL EDITING

Kate Atherley

Clare Devine

Heather Murray

TEST KNITTING

Clara Keegan

Jean Lallier

Liz Marley

Patricia Would

FEATURED YARN

Bloomsbury DK by The Yarn Collective: bit.ly/2uMMxUI

FEATURED JEWELLERY

Freeleaf Design: www.facebook.com/freeleafdesign/

WITH SPECIAL THANKS

Carol Feller

The Yarn Collective

ABOUT INDEPENDENT PUBLISHING

This book is independently published by the author, and this brings many benefits to you, the knitter. Each and every person involved in the production of this book has been actively involved and compensated fairly for their time. The author, the designer of each of these patterns, has personally overseen the entire project, meaning that each time you knit one of the patterns found within these pages, you are working directly from the designer's vision.

Small-scale printing helps reduce wastage and lower this book's carbon footprint. To guarantee that you get value for money, every page has been carefully and succinctly developed. The usability of this book has been our primary concern, and great care has been taken to ensure that each piece of information is as clear and concise as we could make it. Above all else, we want you to enjoy this book, to use it, to read it and refer to it. Often.

ALSO BY WOOLLY WORMHEAD

CIRCLED

Four Hat patterns featuring perfectly joined rings and mesmerising spirals of slipped stitches.

PAINTED WOOLLY TOPPERS FOR KIDS

Ten more Hats designed for hand-dyed, painted and variegated yarns.

PAINTED WOOLLY TOPPERS

Ten Hats designed for hand-dyed, painted and variegated yarns.

PLAYFUL WOOLLY TOPPERS

Ten Hats to inspire your inner child.

HATOPIA

A 'Save Mutonia' fundraiser collection.

CLASSIC WOOLLY TOPPERS

Ten timeless Hats redesigned for the modern knitter.

BAMBEANIES

Twenty quick & quirky Hats to knit for the little people in your life.

TWISTED WOOLLY TOPPERS

Ten original Hat designs featuring cable, bias & twist techniques.

WEE WOOLLY TOPPERS

Ten smart covers for small noggin's.

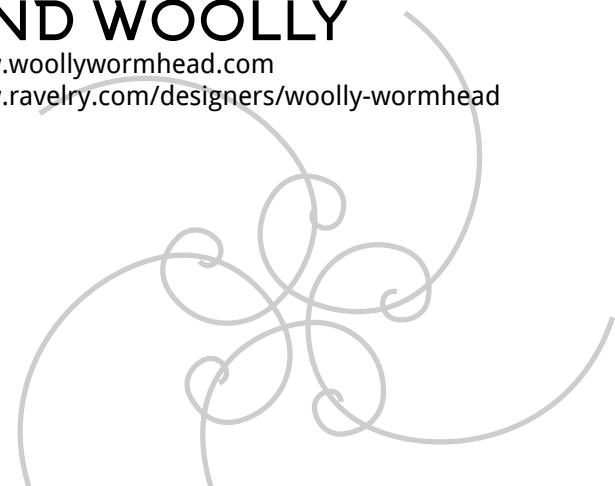
GOING STRAIGHT

A new generation of knitted Hats, knitted on straight needles.

FIND WOOLLY

www.woollywormhead.com

www.ravelry.com/designers/woolly-wormhead



ELEMENTAL

Copyright © 2017 Woolly Wormhead
All Rights Reserved



BALANCE KORRA

AIR
OPAL

EARTH
TOPH

WATER
KATARA

FIRE
AZULA