

SOLAR SYSTEM EXPLORER

Riley Blake
DESIGNS®



63 1/2" x 72 1/2"



= Confident Beginner



10/01/2026

SOLAR SYSTEM EXPLORER

FINISHED QUILT SIZE 63 ½" × 72 ½"

Please read all instructions before beginning this project.
Yardage calculated using a 42" usable width of fabric.

Pattern designed by The RBD Designers.

GENERAL INSTRUCTIONS

Please check www.rileyblakedesigns.com/pattern-updates or scan the QR Code for any updates before starting this project. This pattern requires a basic knowledge of quilting techniques and terminology. The quilt and block diagrams portrayed are virtual images. The layout and look of your project may differ when using actual fabric. It is not recommended to prewash fabric before cutting and assembling.



Always verify your panel size before beginning. If your panel measurements differ from those given in the pattern, trim to the desired size or use coping strips to alter the size of your panel. If coping strips are needed, add oversized, coordinating strips of fabric to the necessary edges of the panel, then trim to the size specified in the pattern.

WOF = Width of Fabric

RST = Right Sides Together

SNF = Stitch and Flip

FABRIC REQUIREMENTS

Fabric is from the Reach for the Stars with NASA collection unless stated otherwise.

(1) GP18336-PANEL Galaxy Panel

(1) 10-18330-42 10" Stacker

Additional Fabrics:

⅓ yard C120-RILEYWHITE Confetti Cotton™ Solid

⅓ yard C605-MAIZE Shabby

1 ¼ yards C610-NEPTUNE Texture

⅔ yard C18334-NAVY Constellations (includes binding)



OTHER SUPPLIES

Basic Sewing Supplies

2 yards WB200-PHANTOM Shade (wide back backing)

Batting

CUTTING INSTRUCTIONS

When cutting fabrics, use a straight edge ruler and rotary cutter. Measurements include ¼" seam allowance. Label, allocate, and organize all cuts as noted.



Galaxy Panel

Fussy cut (1) 35" × 42 ½" Panel rectangle, centered over the motif.*

**Note: If the panel motif does not reach the edge of the required cut, add coping strips first and then trim to the required size.*



10" Stacker

Cut (58) 3 ½" × 9 ½" rectangles. Label as A.



Riley White Confetti Cotton™ Solid

Cut (2) 1" × WOF strips. Subcut:

(4) 1" × 7 ½" rectangles. Label as B.

(8) 1" × 2" rectangles. Label as C.

(16) 1" × 1" squares. Label as D.



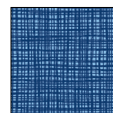
Maize Shabby

Cut (1) 4 ½" × WOF strip. Subcut:

(4) 4 ½" × 7 ½" rectangles. Label as E.

Cut (1) 3" × WOF strip. Subcut:

(4) 3" × 7 ½" rectangles. Label as F.



Neptune Texture

Cut (9) 3 ½" × WOF strips. Piece (7) together end-to-end; subcut:

(2) 3 ½" × 66 ½" strips. Label as G.

(2) 3 ½" × 63 ½" strips. Label as H.

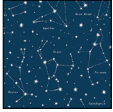
From remaining strips, subcut:

(2) 3 ½" × 39 ½" rectangles. Label as I.

Cut (3) 2 ¾" × WOF strips. Piece together end-to-end; subcut:

(2) 2 ¾" × 42 ½" strips. Label as J.

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Navy Constellations

Cut (7) 2 ½" × WOF strips. Set aside for binding.

Cut (1) 2" × WOF strip. Subcut:

(16) 2" × 2" squares. Label as K.

Cut (4) 1 ½" × WOF strips. Subcut:

(8) 1 ½" × 9 ½" rectangles. Label as L.

(8) 1 ½" × 3 ½" rectangles. Label as M.

(8) 1 ½" × 3" rectangles. Label as N.

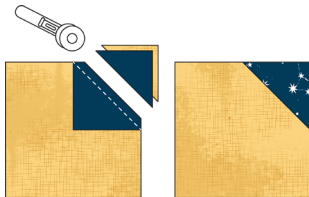
(24) 1" × 1" squares. Label as O.

SEWING TECHNIQUES

Sew all seams RST and with a ¼" seam allowance unless stated otherwise. Refer to the Quilt Layout Diagram for placement of the fabrics. Press seams as desired unless stated otherwise. Dimensions listed in steps are unfinished sizes. Please refer to the following general sewing technique as this method is referenced throughout the pattern in its abbreviated form.

STITCH AND FLIP METHOD (SNF)

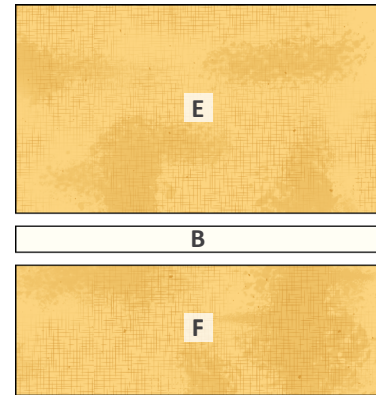
Place (2) pieces RST, matching raw edges in the corner to be replaced. Draw a diagonal line on the wrong side of the smaller piece across the corner. Sew on the drawn line. Trim the seam allowance outside the sewn line to ¼". Flip the smaller piece away from the larger piece and press, replacing the corner. The size of the larger, original piece does not change.



BLOCK ASSEMBLY

1. Sew (1) **E**-rectangle, (1) **B**-rectangle, and (1) **F**-rectangle together as shown below. Repeat to make (4) total units.

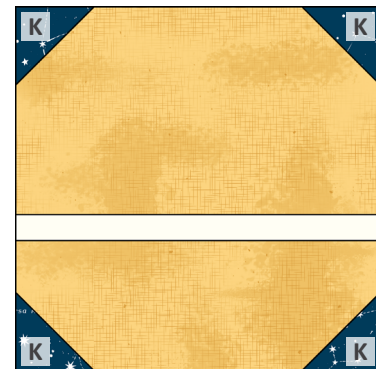
Make (4)



7 ½" × 7 ½"

2. Use the SNF method to sew (1) **K**-square to each corner of (1) Step 1 unit as shown below to make (1) Planet Unit. Repeat to make (4) total units.

Make (4)



7 ½" × 7 ½"

3. Use the SNF method to sew (1) **O**-square to each left corner of (1) **C**-rectangle as shown below. Repeat to make (8) total units.

Make (8)



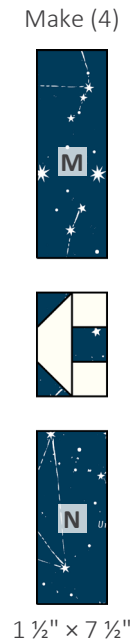
1" × 2"

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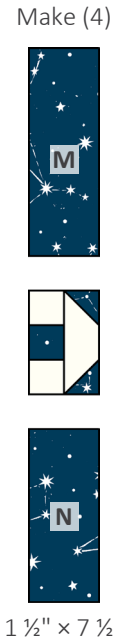
4. Sew (2) **D**-squares and (1) **O**-square together as shown below. Next, sew (1) Step 3 SNF unit to the left side to make (1) Ring Unit. Repeat to make (8) total units.



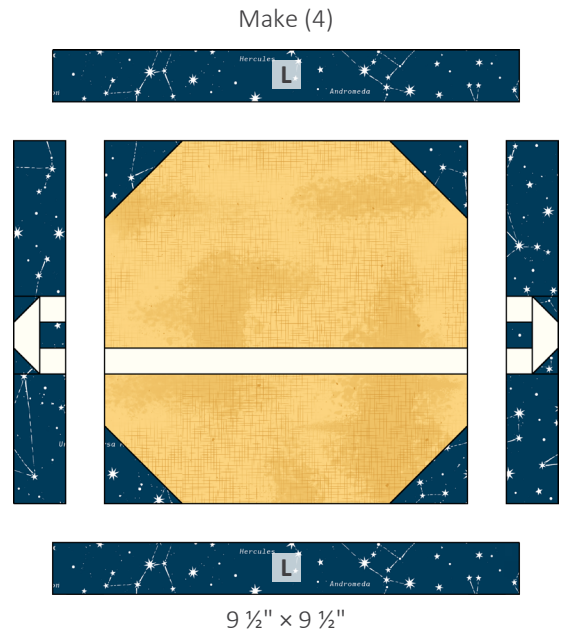
5. Sew (1) **M**-rectangle, (1) Ring Unit, and (1) **N**-rectangle together as shown below to make (1) Left Ring Unit. Repeat to make (4) total units.



6. Repeat Step 5, rotating the Ring Unit as shown below, to make (1) Right Ring Unit. Repeat to make (4) total units.



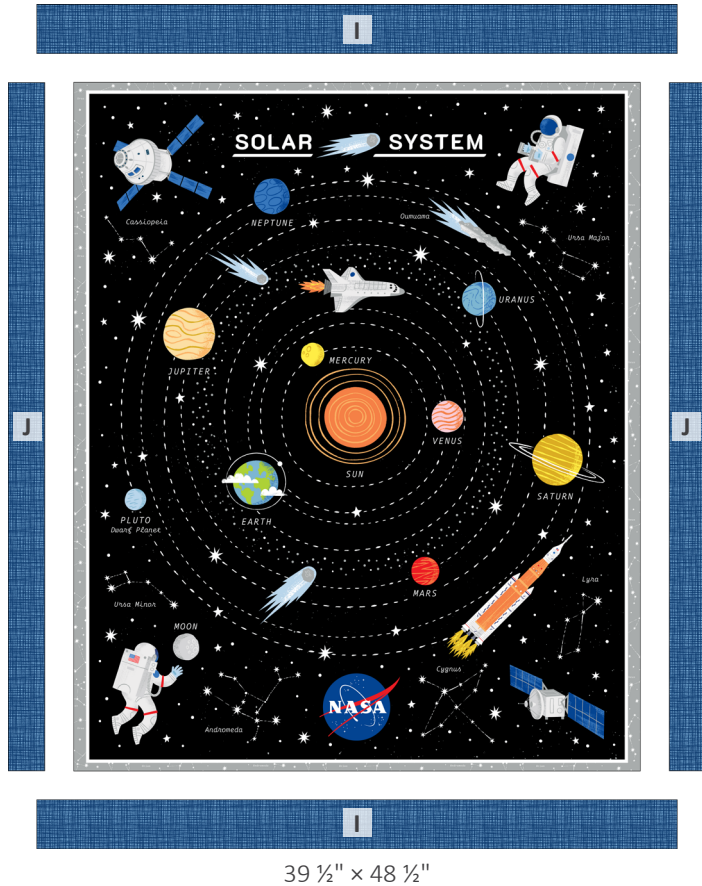
7. Sew (1) Left Ring Unit to the left side and (1) Right Ring Unit to the right side of (1) Planet Unit as shown below. Next, sew (1) **L**-rectangle to the top and bottom to make (1) Planet Block. Repeat to make (4) total blocks.



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QUILT ASSEMBLY

8. Sew (1) **J**-strip to each side of (1) Panel rectangle as shown below. Next, sew (1) **I**-rectangle to the top and bottom to make the quilt center.



9. Sew (16) **A**-rectangles together as shown below to make (1) Side Border Unit. Repeat to make a second unit.

Make (2)



10. Sew (2) Planet Blocks and (13) **A**-rectangles together as shown below to make (1) Top Border Unit. Repeat to make (1) Bottom Border Unit.

Make (2)



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11. Sew (1) Side Border Unit to each side of the quilt center as shown below. Next, sew (1) Top/Bottom Border Unit to the top and bottom. In the same manner, sew **G**-strips to the sides and **H**-strips to the top and bottom to complete the quilt top.

QUILT LAYOUT DIAGRAM



FINISHING INSTRUCTIONS

12. Layer the quilt top, batting, and backing. Baste the quilt layers together and quilt as desired. Sew the Navy Constellations binding strips together end-to-end. Then bind the trimmed, finished quilt using your favorite binding method.

Enjoy and share your quilt using the hashtags: [#reachforthestarsfabric](#), [#solarsystemexplorerquilt](#), [#rileyblakedesigns](#), and [#iloverileyblake](#).