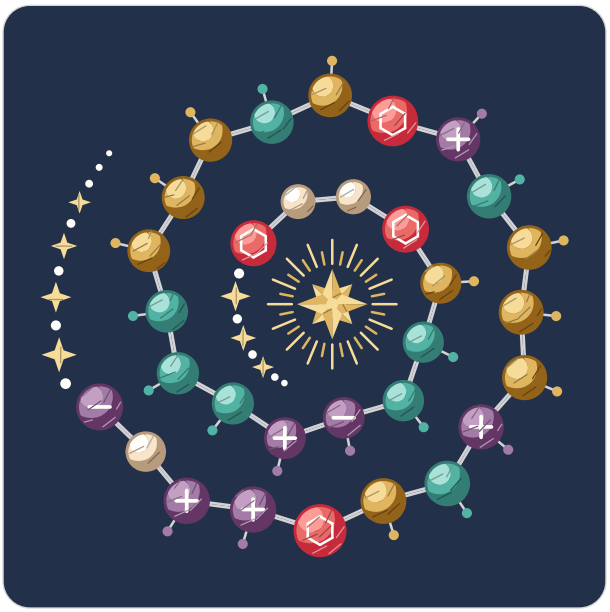
Beta-endorphin molecule, 31 amino acids

6 inch (15 cm) hoop, 4.7 × 4.4 in (11.9 × 11.2 cm)



Colors by number: page 2.
Fabric: navy cotton or linen.

Stitch in this order

Where a stitch page says otherwise, follow this list.

1. **Straight stitch**
   2 strands: silver bonds
   1 strand: side stalks



2. **Satin stitch**, 2 strands
   Sun star, gold stars



3. **Long and short stitch**, 1 strand
   Coral beads, cream beads, gold beads, teal beads, plum beads



4. **Straight stitch**
   2 strands: rays
   3 strands: hexagon rings
   6 strands: plus and minus marks



5. **Split stitch**, 1 strand
   Bead rims

6. **French knot**
   2 strands, two wraps
   Sun center, star knots, side knots



Take out lines that still show, press face down, finish the hoop.

How to read it

Floss has six strands: cut 18 inches (45 cm), pull out the number named one at a time, and lay them together.

Start a filling with tiny stitches, a line with a small knot; end under stitches on the back.

Every stitch in pictures: flossfield.com/embroidery/stitches.

New to this: flossfield.com/embroidery/guides/how-to-start.

Onto the fabric

Fabric that lets light through: page 3 on a bright light, the fabric over it; trace with a white pencil.

Other fabric: print page 3 on a sticky wash-away sheet, stick it on, stitch through it and rinse it away.

Or white or yellow carbon paper, colored side down, page 3 on top; trace with a ballpoint and go over a faint line with a white pencil.

Then hoop it, inner ring under, tight as a drum.

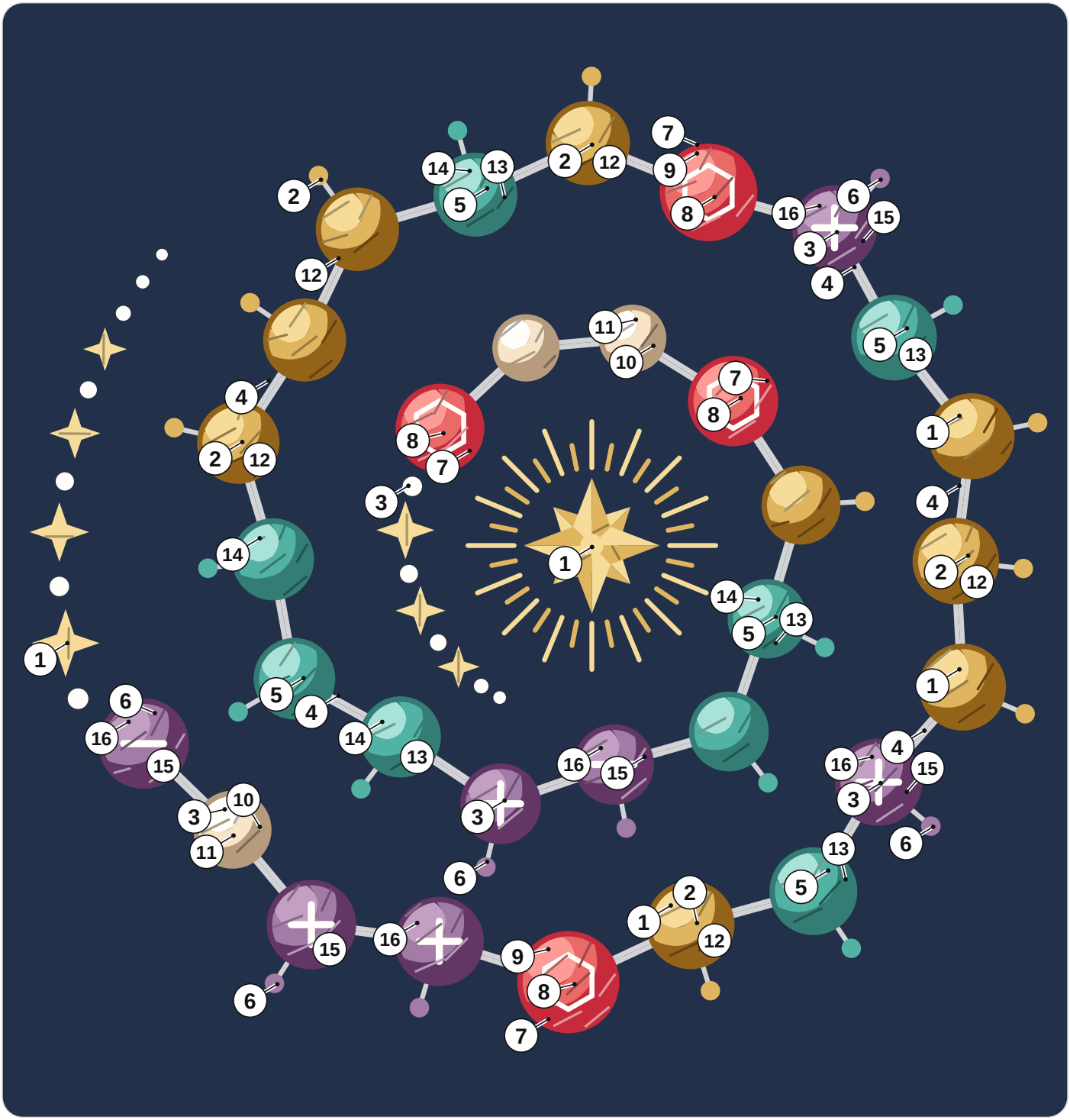
Buy: 16 colors of floss (page 2), one skein of each color (an estimate from the drawing's lines and shapes), embroidery needles size 9, and size 3 for 4 to 6 strands, a 6 inch (15 cm) hoop, a 9 inch (23 cm) square of navy cotton or linen, a white pencil.

For your own stitching, gifts and handmade pieces you sell. Do not resell or share this PDF or copies of it.

Beta-endorphin molecule, 31 amino acids

6 inch hoop

A number is a color of the list. Fine lines show which way the stitches lie: do not stitch them.



1	DMC 3822 Light Straw	**7**	DMC 321 Red	**13**	DMC 3847 Dark Teal Green
2	DMC 3820 Dark Straw	**8**	DMC 351 Coral	**14**	DMC 964 Light Seagreen
3	DMC BLANC White	**9**	DMC 352 Light Coral	**15**	DMC 327 Dark Violet
4	DMC 415 Pearl Gray	**10**	DMC 841 Light Beige Brown	**16**	DMC 210 Medium Lavender
5	DMC 3849 Light Teal Green	**11**	DMC 739 Ultra Very Light Tan		
6	DMC 209 Dark Lavender	**12**	DMC 780 Ultra Very Dark Topaz		

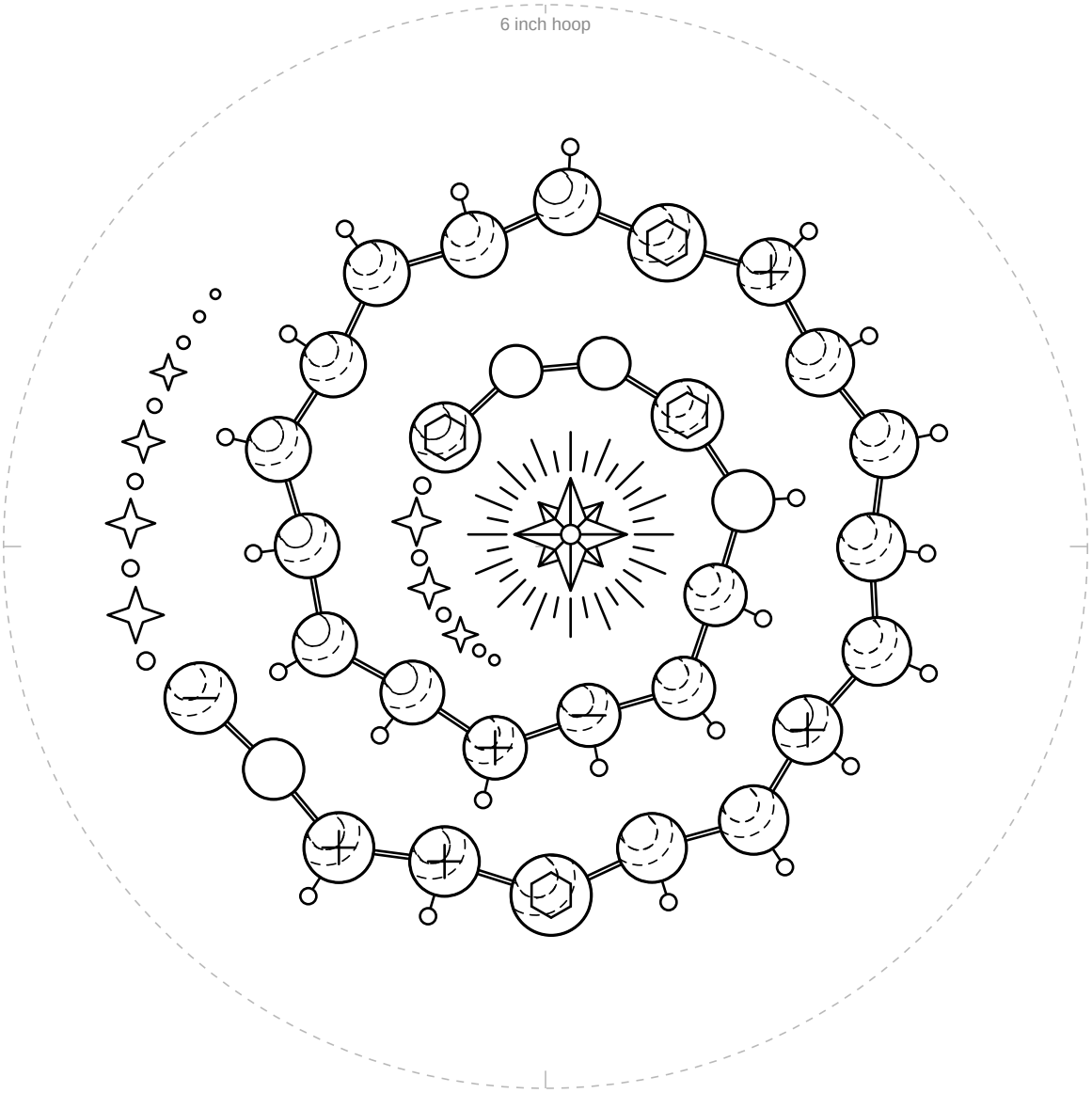
For your own stitching, gifts and handmade pieces you sell. Do not resell or share this PDF or copies of it.

Beta-endorphin molecule, 31 amino acids

6 inch hoop

Print at 100% and measure the square. Trace the black lines only. The gray ring is the hoop: fold the fabric in four and lay the folds on its ticks.

On the drawing a ring is one French knot: mark a dot; a broken line inside a shape is where two shades meet: trace it, do not stitch it.



1 in
25.4 mm

Not 1 inch (25.4 mm)? Print again at 100%.

For your own stitching, gifts and handmade pieces you sell. Do not resell or share this PDF or copies of it.