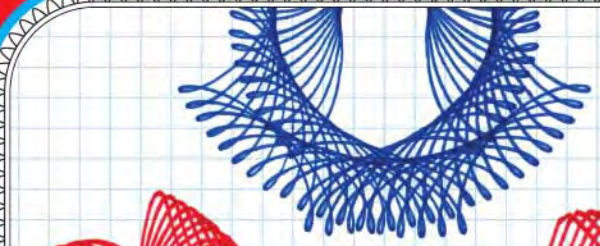
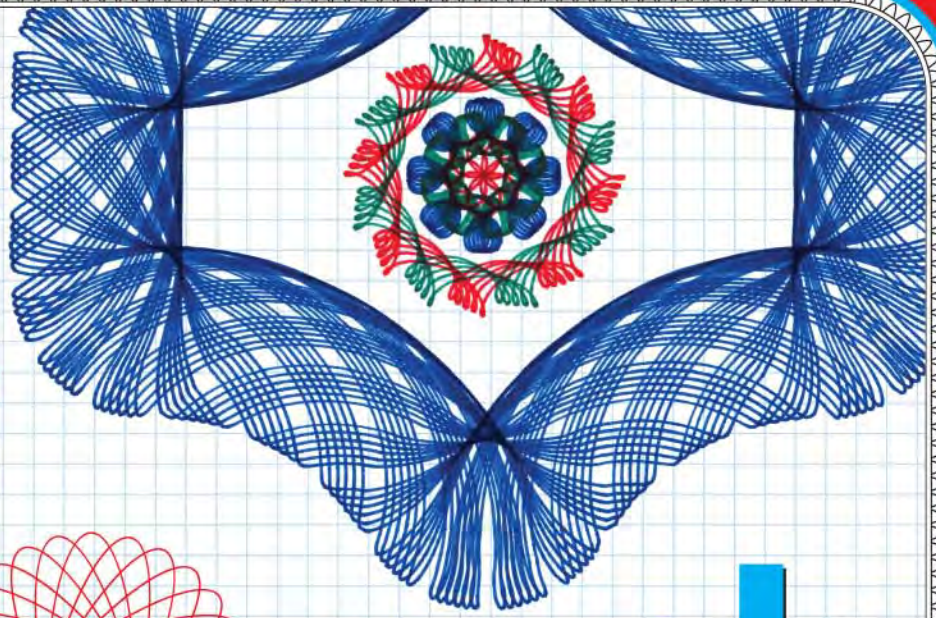
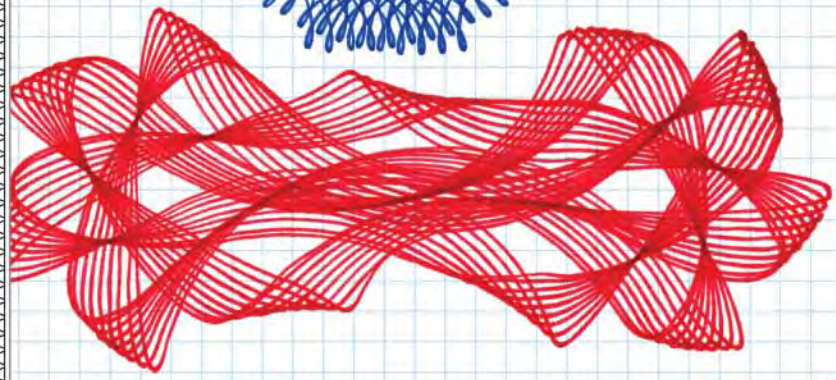


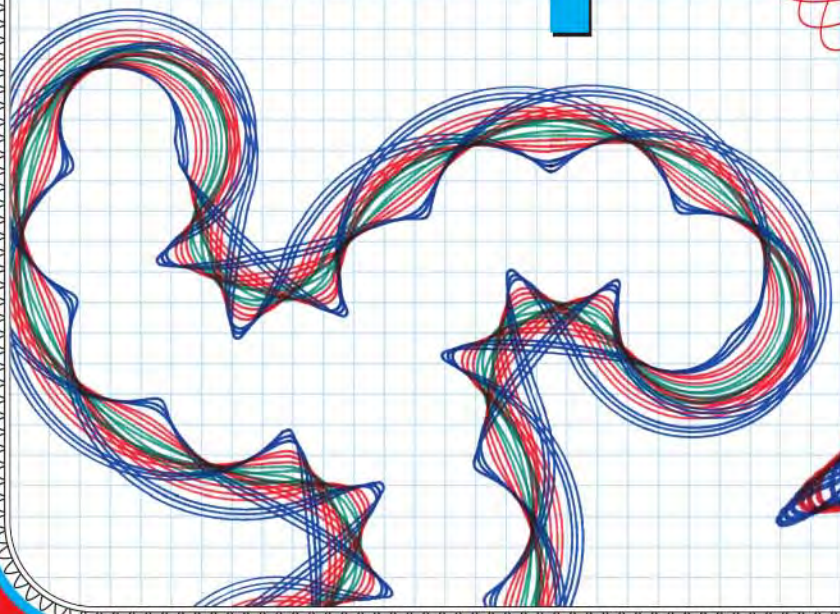


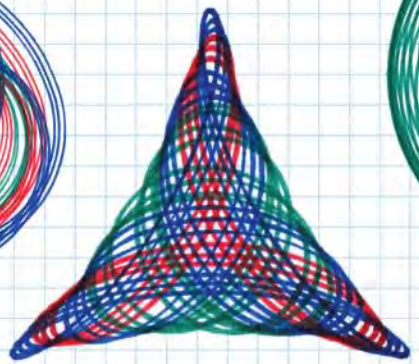


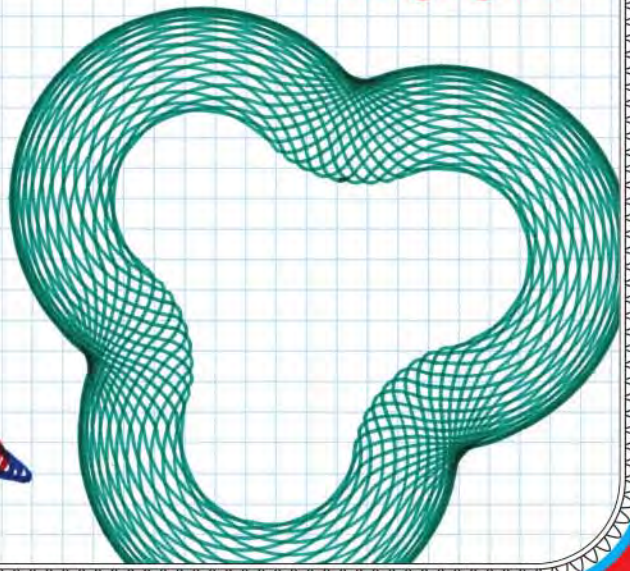
the original

SUPERspirograph®

design guide



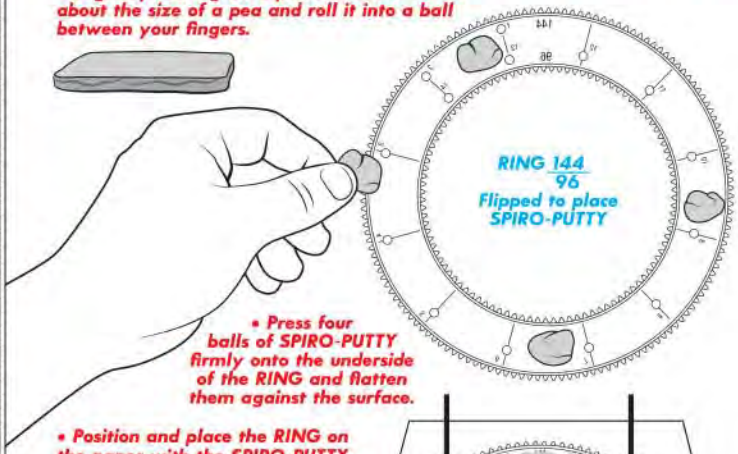




Getting Started

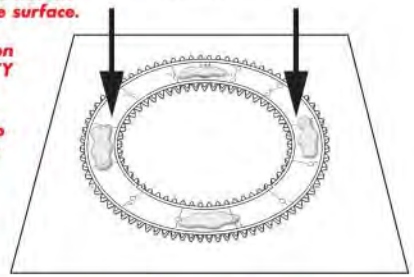
*The reusable **SPIRO-PUTTY** holds the fixed position Spirograph® pieces securely in place on the paper. Making sure that the piece is locked in position will improve the accuracy of the finished design.*

- *Begin by tearing off a piece of SPIRO-PUTTY about the size of a pea and roll it into a ball between your fingers.*



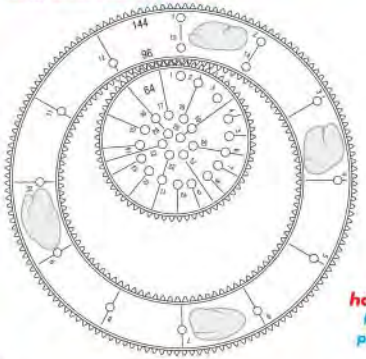
- *Press four balls of SPIRO-PUTTY firmly onto the underside of the RING and flatten them against the surface.*

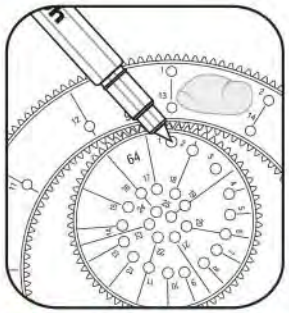
- *Position and place the RING on the paper with the SPIRO-PUTTY pieces facing down. Press the RING firmly down onto the paper and twist slightly to help the SPIRO-PUTTY stick securely to the paper. Make sure that the edges of the RING are making contact with the paper surface so that the WHEELS will not slide underneath the RING.*



NOTE: To protect furniture, always place your paper on the work surface inside the storage case or on top of a placemat before creating your Spirograph® design. Ball point pens can leave marks on some surfaces.

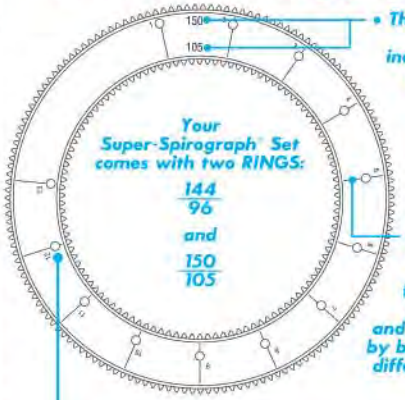
- *Place a WHEEL inside the RING and engage the teeth of both pieces so they interlock as shown.*





- *Place a PEN into one of the numbered holes on the WHEEL.* *NOTE: When using your pens for the first time, scribble for a few moments on a piece of scrap paper in order to get the ink flowing.*

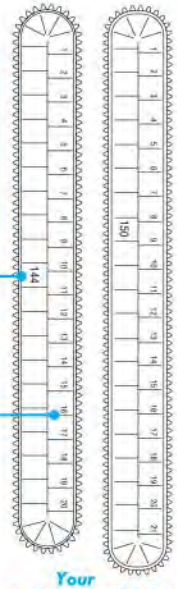
- *The markings on each Spirograph® piece have different meanings. Understanding these meanings will allow you to create even more amazing Spirograph® Designs.*



- *The large numbers engraved on the RINGS and RACKS indicate how many teeth are on the RING or RACK. The top number on the RINGS is for the outside track and the bottom number is for the inside track.*

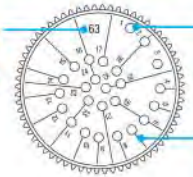
- *The POSITIONING LINES are used to determine the different starting points for your patterns. You can use the same WHEEL HOLE and achieve 2 different results by beginning your design from different POSITIONING LINES.*

- *You can use your PEN in the numbered HOLES on the RING to create large designs by rotating the RING around a fixed WHEEL.*



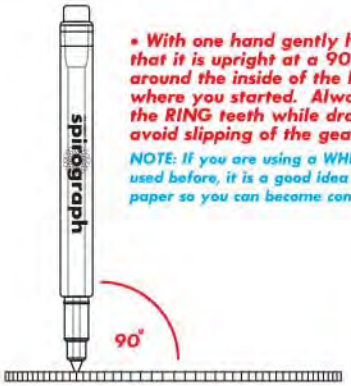
Your Super-Spirograph® Set comes with two RACKS: 144 and 150

- *The large numbers engraved on each of the WHEELS indicate the number of teeth.*



- *Each numbered WHEEL hole produces a slightly different pattern.*

- *The POSITIONING LINES are used to determine the different starting points for your patterns.*



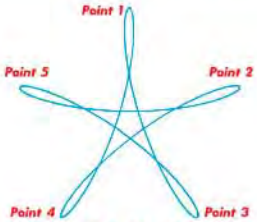
- *With one hand gently holding the RING, position your pen so that it is upright at a 90 degree angle. Move the WHEEL carefully around the inside of the RING and continue until your line meets where you started. Always keep the WHEEL teeth in contact with the RING teeth while drawing and move the WHEEL slowly to avoid slipping of the gears.*

NOTE: If you are using a WHEEL or WHEEL HOLE that you have never used before, it is a good idea to do a few test designs on a piece of scrap paper so you can become comfortable with the movement of the pieces.

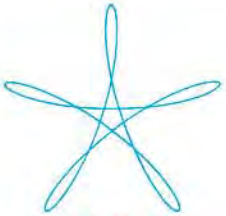
- *When you are finished with your design, remove the RING from your paper by gently twisting to release. Do not pull straight up as this might tear the paper. Gather up the remaining SPIRO-PUTTY and store for future use.*

Wheel Holes

The number of teeth on a WHEEL and RING determines the number of points on the pattern. The examples below were drawn by using every hole on WHEEL No. 63 with the inside track of RING $\frac{150}{105}$ You can see that while the shape of the pattern changes, the number of points stays the same.

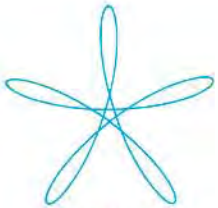


Hole No. 1



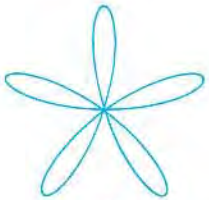
Hole No. 2

Hole No. 3



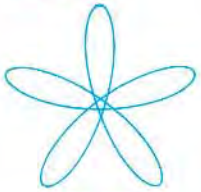
Hole No. 4

Hole No. 5

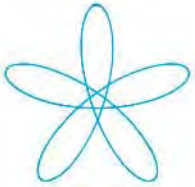


Hole No. 6

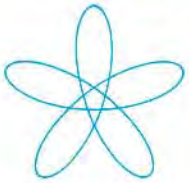
Hole No. 7



Hole No. 8

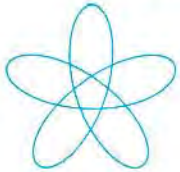


Hole No. 9



Hole No. 10

Hole No. 11



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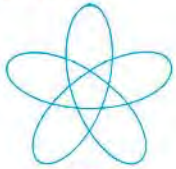

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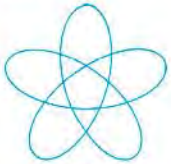
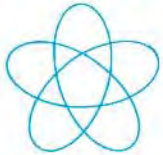
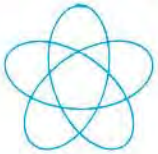


Hole No. 14

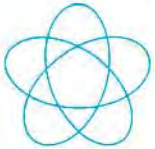
Hole No. 15



Hole No. 16

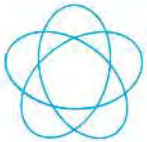


Hole No. 17



Hole No. 18

Hole No. 19



Hole No. 20

Hole No. 21

Hole No. 22

Hole No. 23

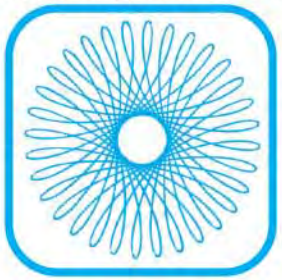
Hole No. 24

Hole No. 25

Now see how changing the RING changes the pattern:

Both of the designs on the right were created using hole #1 of WHEEL No. 63

Using the inner track of the $\frac{150}{105}$ RING



Using the inner track of the $\frac{144}{96}$ RING

- *Notice that the number of teeth on the RING changes the number of POINTS in the pattern.*

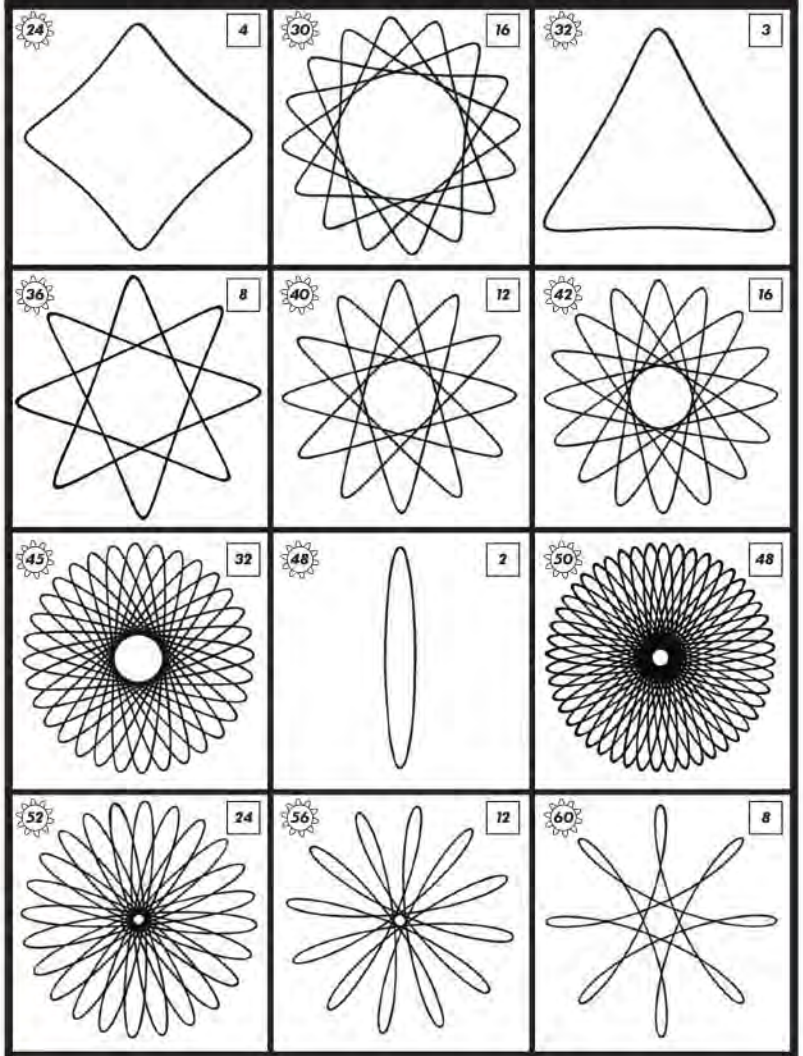
Spirograph® Basic Pattern Guide

The patterns below were drawn with the pen in Hole No. 1 of each WHEEL.

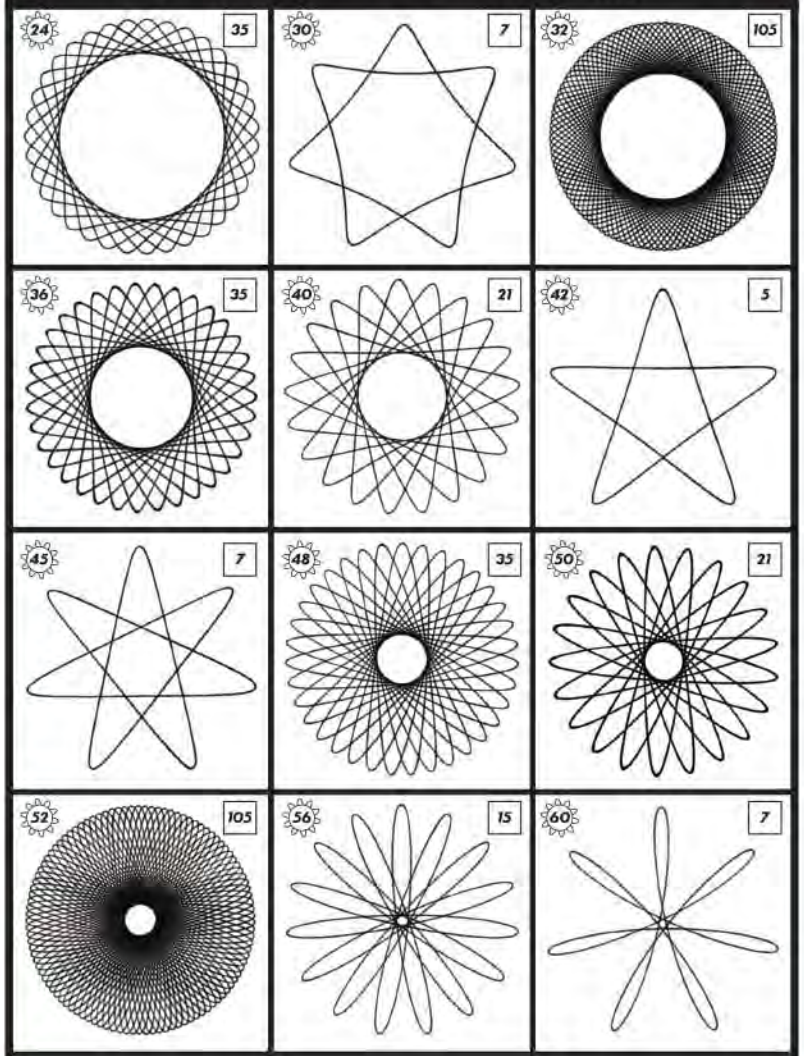
= WHEEL used to create pattern

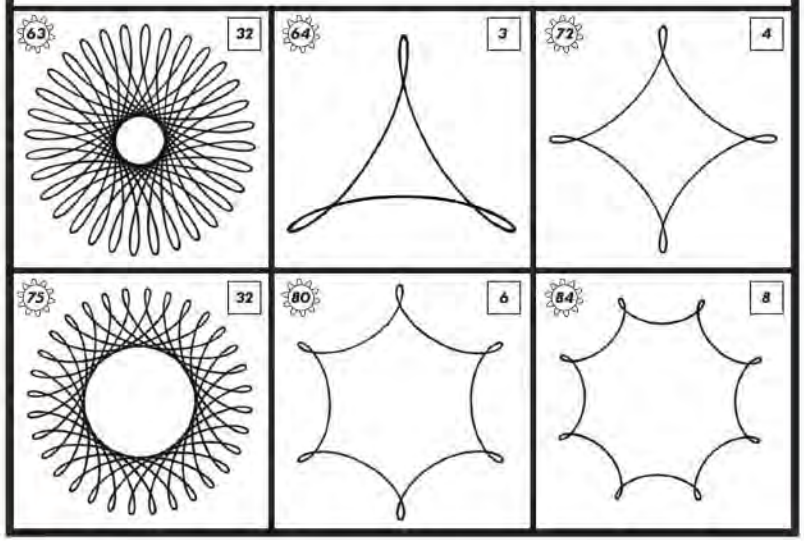
= Number of points in pattern

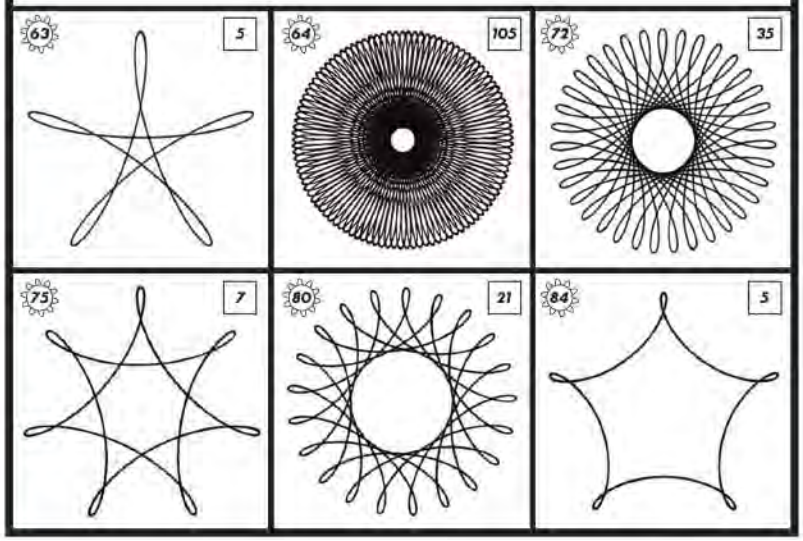
Patterns created using RING No. 144/96



Patterns created using RING No. 150/105

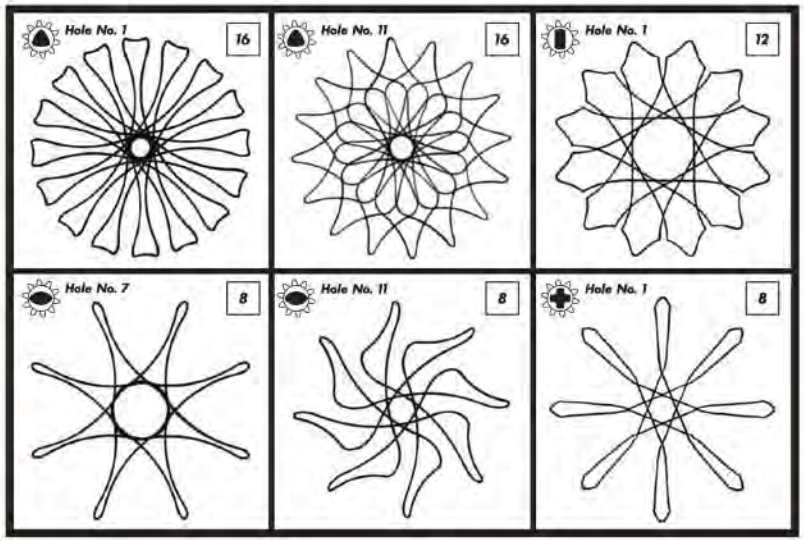


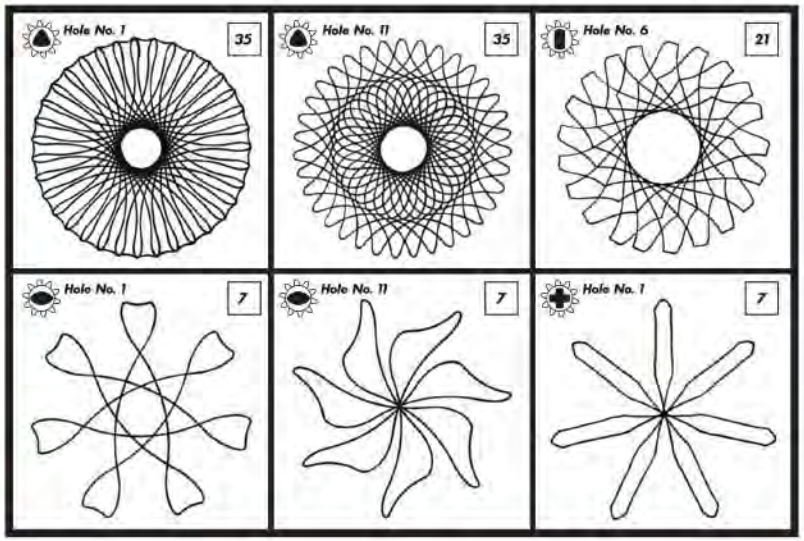




Examples of patterns created using different HOLES of the SHAPED WHEELS.

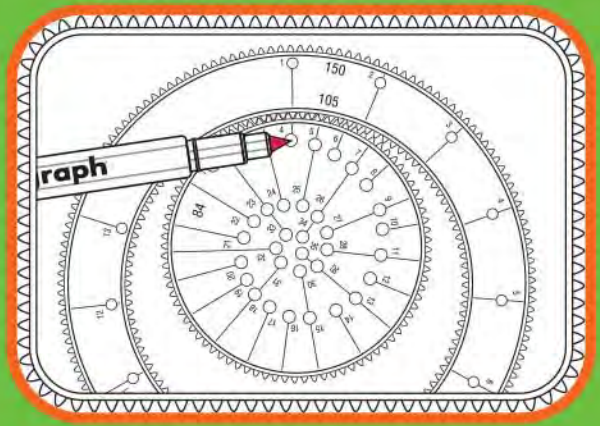
= TRIANGLE WHEEL **= OVAL WHEEL** **= BAR WHEEL** **= QUAD WHEEL**

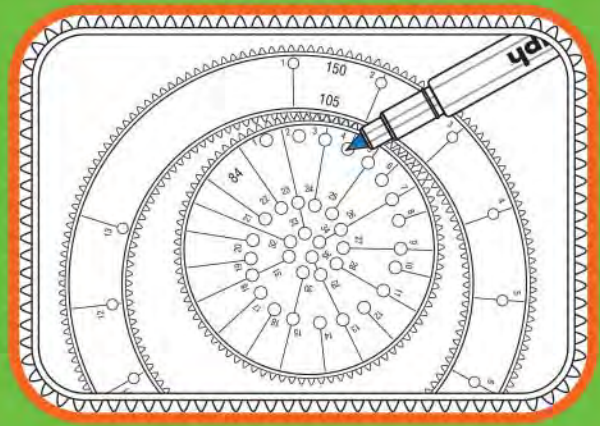


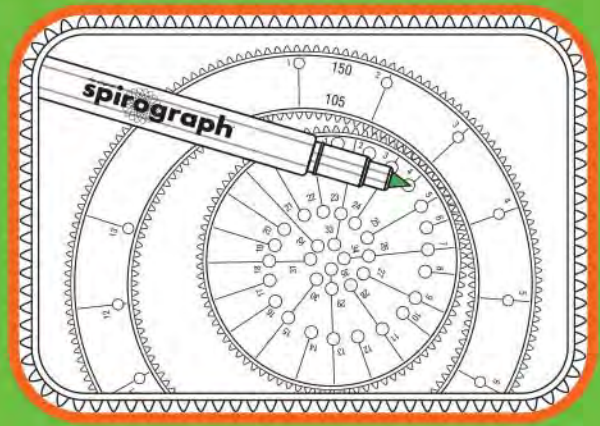


Designs Using the Positioning Lines

By using the POSITIONING LINES to begin your design at different starting points along the RING, you can create more complex patterns. The design below uses HOLE No. 4 on WHEEL No. 84 on the inside track of RING $\frac{150}{105}$, using a different color pen for each different starting position.







$\frac{150}{105}$ • 84 • **HOLE: 4**

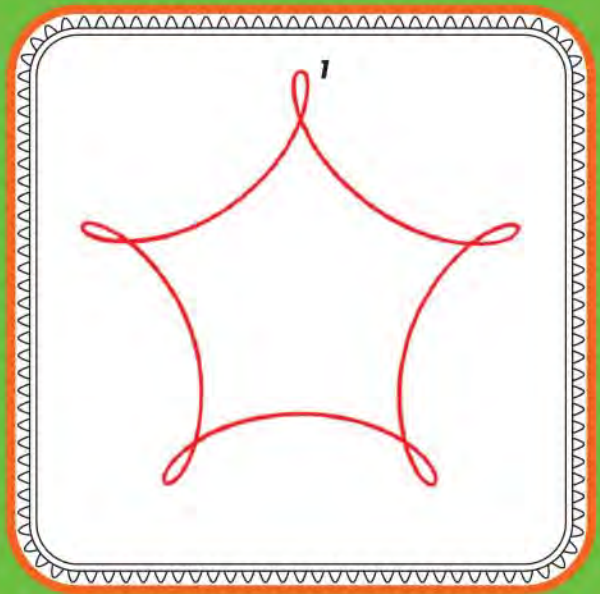
Hole No. 4 in Starting Position No. 1 on the RING.

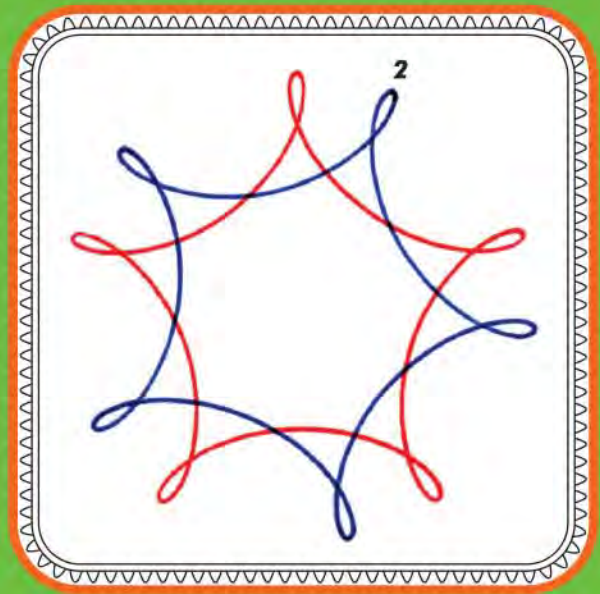
$\frac{150}{105}$ • 84 • **HOLE: 4**

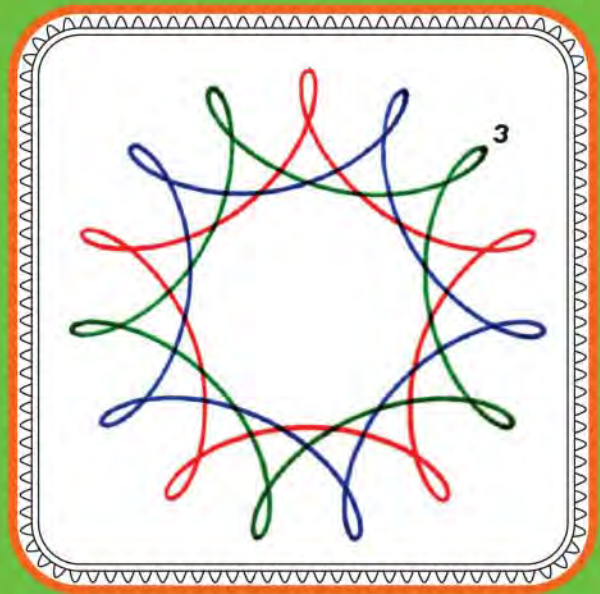
Hole No. 4 in Starting Position No. 2 on the RING.

$\frac{150}{105}$ • 84 • **HOLE: 4**

Hole No. 4 in Starting Position No. 3 on the RING.

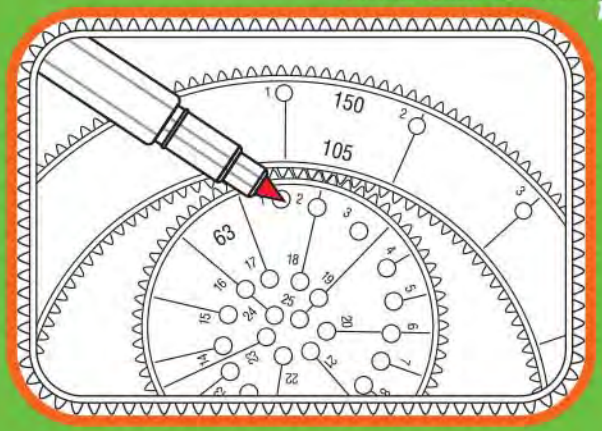






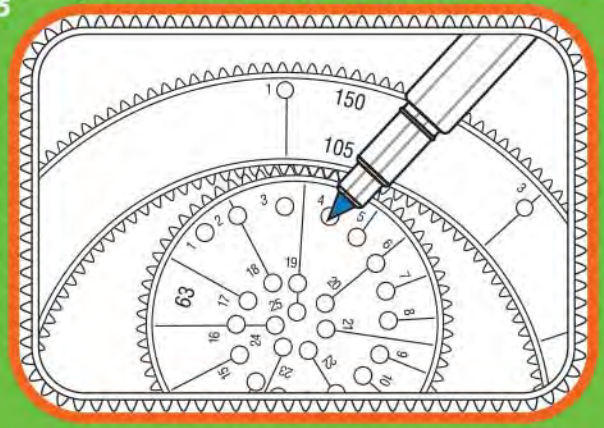
Designs Using Shifting Teeth and Holes

You can create smaller steps between patterns by shifting the WHEEL one or more teeth to different starting points along the RING. Add even more variety by changing holes for each pattern. The design below uses HOLES No. 1, 4 and 7 on WHEEL No. 63 on the inside track of RING $\frac{150}{105}$, using a different color pen for each different starting position and hole.



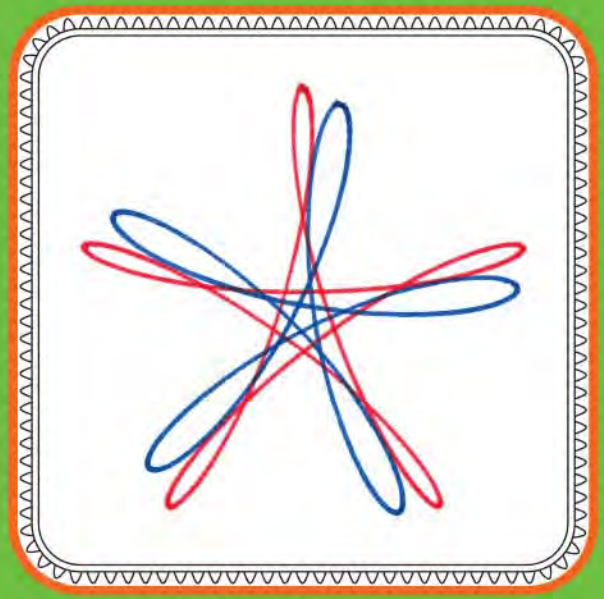
$\frac{150}{105}$ • 63 • ***HOLE: 1***

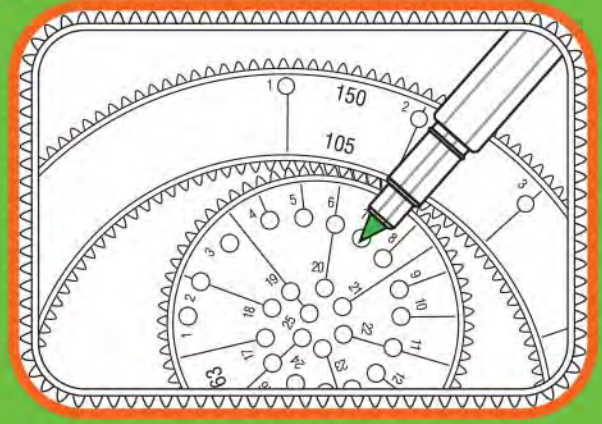
Hole No. 1 in Starting Position No. 1 on the RING.



$\frac{150}{105}$ • 63 • ***HOLE: 4***

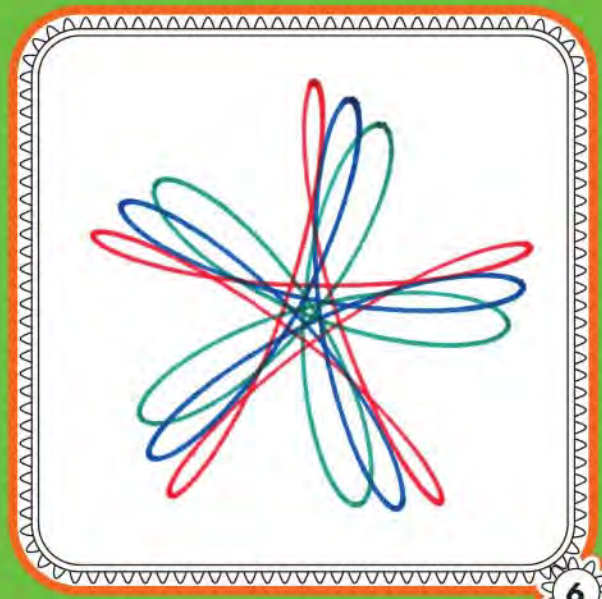
Hole No. 4 shift three teeth to the right.





$\frac{150}{105}$ • 63 • ***HOLE: 7***

Hole No. 7 shift three more teeth to the right.



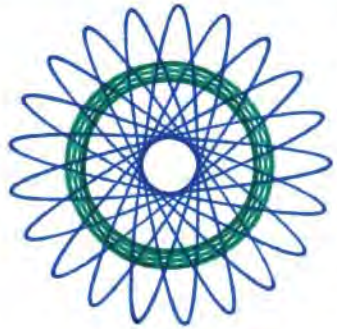
Designs with Wheels Inside Rings

Design Key

150/105 • 80 • HOLES: 1-6-16-21

Indicates the RING used | Indicates the WHEEL used | Indicates the HOLE used on the WHEEL and the color of the PEN

Use this Key to follow the instructions for creating any Spirograph® patterns.

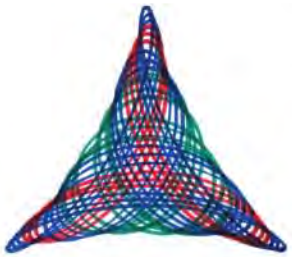


150/105 • 50 • HOLES: 1-16

Place WHEEL No. 50 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

With the Blue Pen in Hole 1, draw the first pattern until the line meets where it began.

Leaving the RING secured in place on the paper, reposition the WHEEL so that Hole 16 lines up with POSITIONING LINE No. 1 on the RING. Using the Green Pen in Hole 16, draw the second pattern on top of the previous pattern.



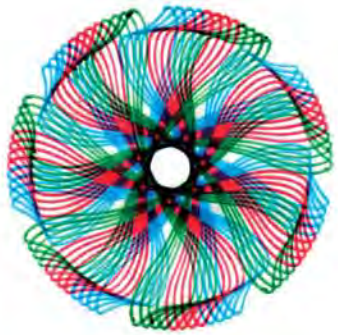
144/96 • 64 • HOLES: 1-3-5-7-9-11-13-15-17-19-21-23-25

Place WHEEL No. 64 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

With the Blue Pen in Hole 1, draw the first pattern until the line meets where it began.

Leaving the RING secured in place on the paper, reposition the WHEEL so that Hole 3 lines up with POSITIONING LINE No. 1 on the RING. Draw one pattern using the Blue Pen in Hole 3.

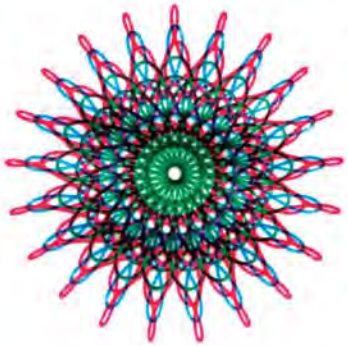
Use the Blue Pen in Hole 5 starting at POSITIONING LINE No. 1 on the RING to draw another pattern. Repeat the process with the odd numbered Holes; 7-9-11 with the Red Pen, 13-15-17 with the Blue Pen and 19-21-23-25 with the Green Pen.



144/96 • • HOLES: 13-13-13-13-13-13-13-13-13-13-13-13

Place the OVAL WHEEL so that Hole 13 lines up with POSITIONING LINE No. 1 on the RING.

With the Blue Pen in Hole 13, draw the first pattern until the line meets where it started. Move the WHEEL one tooth to the right on the RING and draw the second pattern on top of the first. Repeat with the Blue Pen two more times and then draw four patterns with the Red Pen and four patterns with the Green Pen.



150/105 • 80 • HOLES: 1-6-11-16-21

Place WHEEL No. 80 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

With the Red Pen in Hole 1, draw the first pattern until the line meets where it began.

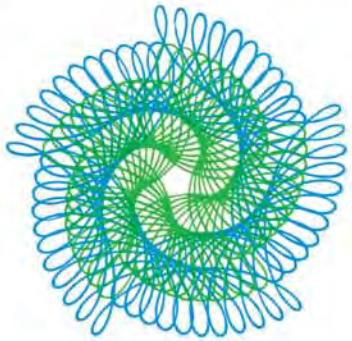
Leaving the RING secured in place on the paper, reposition the WHEEL so that Hole 6 lines up with POSITIONING LINE No. 1 on the RING. Using the Blue Pen in Hole 6, draw the second pattern on top of the previous pattern. Repeat using the Red Pen in Hole 11, and the Green Pen in Holes 16 and 21.

144/96 • 84 • HOLES: 2 thru 10 - 4 thru 12

Place WHEEL No. 84 so that Hole 2 lines up with POSITIONING LINE No. 1 on the RING.

Draw nine patterns using the Red Pen in Holes 2 thru 10, moving your starting position one tooth to the right on the RING for each different Hole.

Align Hole 4 with POSITIONING LINE No. 1 on the RING and draw nine patterns using the Blue Pen in Holes 4 thru 12, moving your starting position one tooth to the right on the RING for each different Hole.

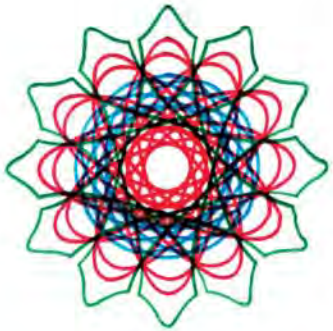


150/105 • 84 • HOLES: 1 thru 11
12 thru 22

Place WHEEL No. 84 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

With the Blue Pen, draw patterns using Holes 1 thru 11. Move the WHEEL two teeth to the right on the RING before drawing each pattern.

Align Hole 12 with POSITIONING LINE No. 1 on the RING. With the Green Pen, draw patterns using Holes 12 thru 22. Move the WHEEL two teeth to the right on the RING before drawing each pattern.



144/96 • HOLE: 1

56 • HOLES: 10-14-20

Place the BAR so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Use the Green Pen in Hole 1 to draw the first pattern.

Leaving the RING secured in place on the paper, place WHEEL No. 56 so that Hole 10 lines up with POSITIONING LINE No. 1 on the RING.

Use the Red Pen in Holes 10 and 14 and the Blue Pen in Hole 20 to complete the design, starting each pattern with the new Hole aligned with POSITIONING LINE No. 1 on the RING.

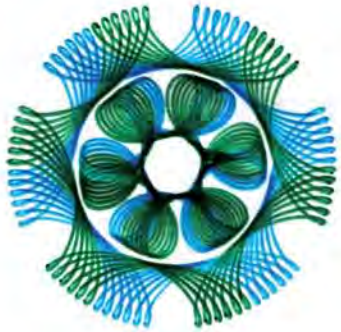
150/105 • 63 • HOLES: 1-3-5-7-9-11-13-15-17

Place WHEEL No. 63 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Using the Red Pen, draw patterns with Holes 1, 3 and 5 making sure to begin with each Hole at POSITIONING LINE No. 1 on the RING.

Using the Green Pen, draw patterns with Holes 7, 9 and 11 making sure to begin with each Hole at POSITIONING LINE No. 1 on the RING.

Using the Blue Pen, draw patterns with Holes 13, 15 and 17 making sure to begin with each Hole at POSITIONING LINE No. 1 on the RING.

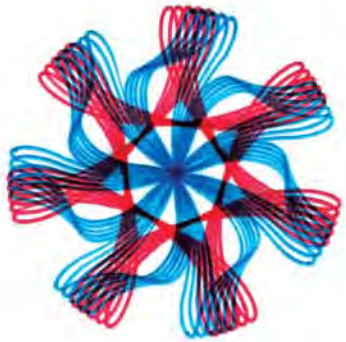


144/96 • 80 • HOLES: 1x6 - 1x6 -
20x6 - 20x3

Place WHEEL No. 80 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Draw six patterns using the Blue Pen in Hole 1 and six patterns using the Green Pen in Hole 1, moving the WHEEL one tooth to the right on the RING for each pattern.

Align Hole 20 to POSITIONING LINE No. 1 on the RING and draw six patterns using the Green Pen in Hole 20 and then three patterns using the Blue Pen in Hole 20 moving the WHEEL one tooth to the right for each pattern.



150/105 • 75 • HOLES: 5-5-5-5-5

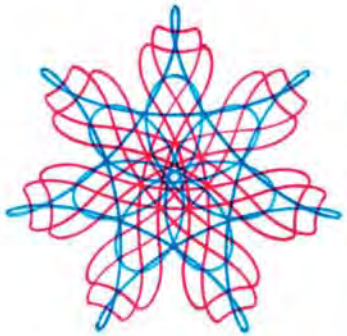
• HOLES: 11-11-11-11-11

Place WHEEL No. 75 so that Hole 5 lines up with POSITIONING LINE No. 1 on the RING.

Draw five patterns using the Red Pen in Hole 5, moving the WHEEL one tooth to the right on the RING for each pattern.

Place the OVAL WHEEL so that Hole 11 lines up with POSITIONING LINE No. 1 on the RING.

Draw five patterns using the Blue Pen in Hole 11, moving the WHEEL one tooth to the right on the RING for each pattern.



150/105 • • HOLES: 1-2

75 • HOLES: 1-20

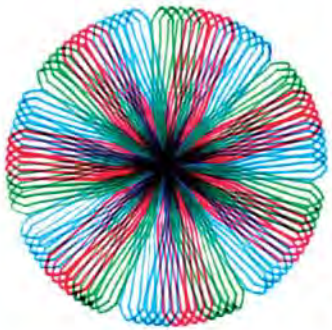
Place the OVAL WHEEL so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

With the Red Pen in Hole 1, draw the first pattern until the line meets where it started. From the same starting position use the Red Pen in Hole 2 to draw the second pattern. Keeping the RING secured on the paper, remove the OVAL WHEEL and switch to WHEEL No. 75.

Place WHEEL No. 75 so that Hole 1 lines up two teeth to the left of POSITIONING LINE No. 1 on the RING. Draw a pattern with the Blue Pen in Hole 1.

Align Hole 20 two teeth to the left of POSITIONING LINE No. 1 on the RING and draw a pattern with the Blue Pen in Hole 20.

Designs with Wheels Inside Rings



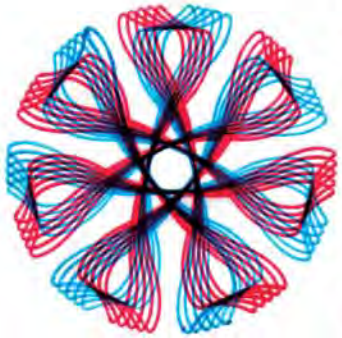
150/105 • HOLES: 1-1-1-1 - 1-1-1-1-1-1-1-1

Place the QUAD WHEEL so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Draw four patterns using the Green Pen in Hole 1, moving the WHEEL one tooth to the right for each pattern.

Draw four patterns using the Red Pen in Hole 1, moving the WHEEL one tooth to the right for each pattern.

Draw four patterns using the Blue Pen in Hole 1, moving the WHEEL one tooth to the right for each pattern.

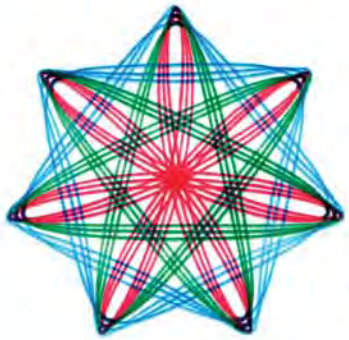


150/105 • HOLES: 13-13-13-13-13-13-13-13-13-13

Place the OVAL WHEEL so that Hole 13 lines up with POSITIONING LINE No. 1 on the RING.

With the Blue Pen in Hole 13, draw the first pattern until the line meets where it started. Repeat 4 more times moving the WHEEL one tooth to the right on the RING before drawing each pattern.

Turn the WHEEL over so that the numbers are facing down and line up Hole 13 with POSITIONING LINE No. 1 on the RING. With the Red Pen in Hole 13, draw the first pattern until the line meets where it started. Repeat 4 more times moving the WHEEL one tooth to the left on the RING for each pattern.



150/105 • 30 • HOLES: 1-3-5

45 • HOLES: 1-3-5

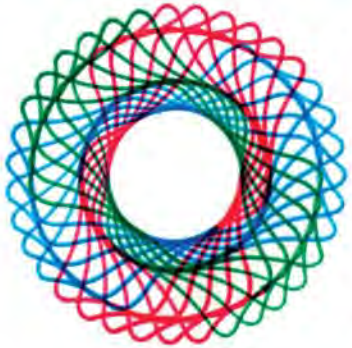
60 • HOLES: 1-3-5

Place WHEEL No. 30 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Using the Blue Pen, draw patterns with Holes 1, 3 and 5 making sure to align each Hole with POSITIONING LINE No. 1 on the RING.

Using WHEEL No. 45, draw patterns with the Green Pen in Holes 1, 3 and 5 making sure to align each Hole with POSITIONING LINE No. 1 on the RING.

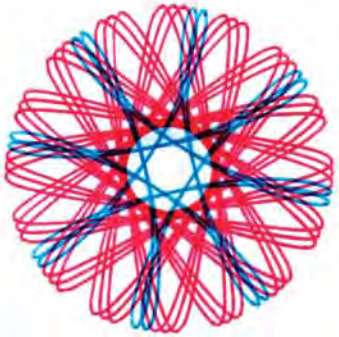
Using WHEEL No. 60, draw patterns with the Red Pen in Holes 1, 3, and 5 making sure to align each Hole with POSITIONING LINE No. 1 on the RING.



150/105 • HOLES: 9-9-9

Place the TRIANGLE WHEEL so that Hole 9 lines up with POSITIONING LINE No. 1 on the RING.

With the Red Pen in Hole 9, draw six loops around the RING and stop when you get back to POSITIONING LINE No. 1. Carefully remove the Pen from the HOLE while leaving the WHEEL in place on the paper. Continue the pattern using the Blue Pen in Hole 9, drawing another six loops around the RING. Repeat with the Green Pen in Hole 9 for six more loops to complete the design.



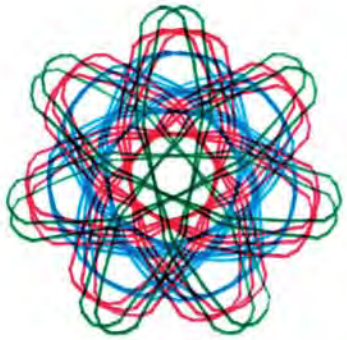
144/96 • 42 • HOLES: 1-1-1

60 • HOLES: 1-1

Place WHEEL No. 42 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Draw three patterns using the Red Pen in Hole 1, moving the WHEEL one tooth to the right for each pattern.

Align Hole 1 on WHEEL No. 60 with POSITIONING LINE No. 12 on the RING. Draw a pattern using the Blue Pen in Hole 1, then move the WHEEL one tooth to the left and draw another pattern with the Blue Pen in Hole 1 to complete the design.



150/105 • HOLES: 4-4-4-4-3-3-3-2-2

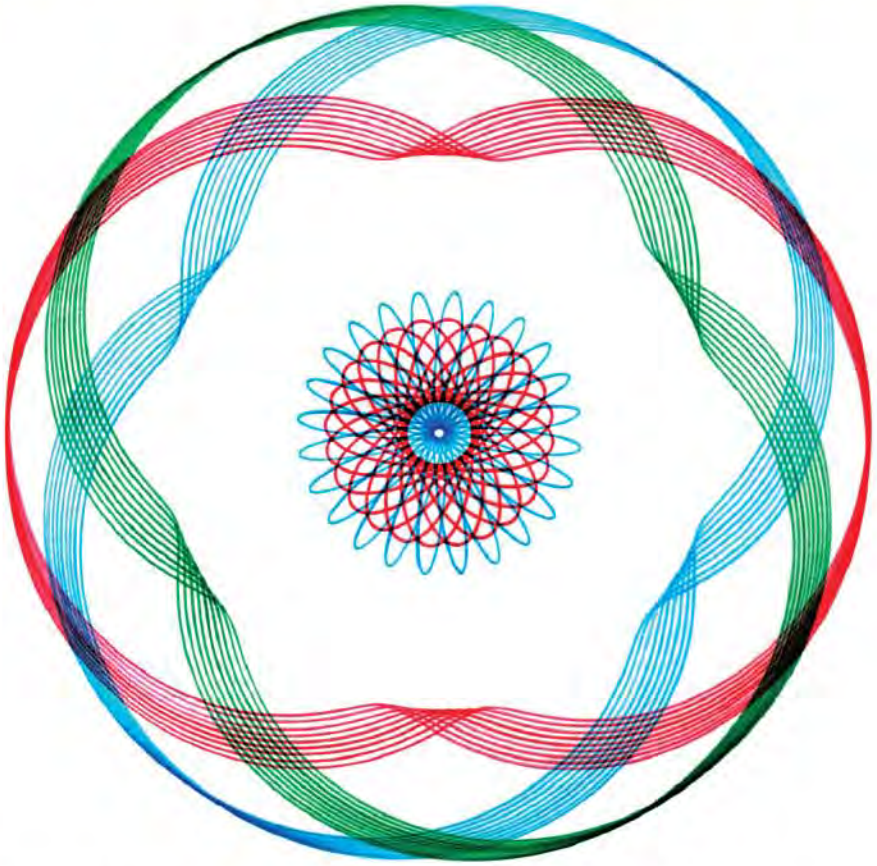
Place the QUAD WHEEL so that Hole 4 lines up with POSITIONING LINE No. 1 on the RING.

Draw four patterns with the Blue Pen in Hole 4, moving the WHEEL two teeth to the right before drawing each pattern.

Place the WHEEL so that Hole 3 aligns with POSITIONING LINE No. 1 on the RING and draw 3 patterns with the Red Pen in Hole 3, moving the WHEEL two teeth to the right before drawing each pattern.

Place the WHEEL so that Hole 2 aligns with POSITIONING LINE No. 1 on the RING and draw 2 patterns with the Green Pen in Hole 2, moving the WHEEL two teeth to the right before drawing each pattern.

Big Designs Using the Outside of Rings



FOR OUTSIDE OF RING

$\frac{144}{96}$ • 72 • HOLES: 9x9 - 9x9 - 9x9

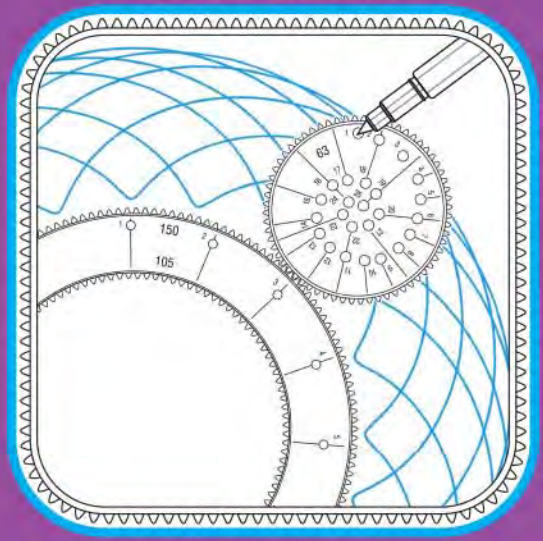
Secure the RING to the paper with SPIRO-PUTTY and align Hole 9 on WHEEL No. 72 with POSITIONING LINE No. 1 on the RING. Use a Red Pen in Hole 9 to draw nine patterns, moving the starting position one tooth to the right on the RING for each pattern. Repeat steps with a Green Pen at position 3 on the RING and a Blue Pen at position 5.

FOR INSIDE OF RING

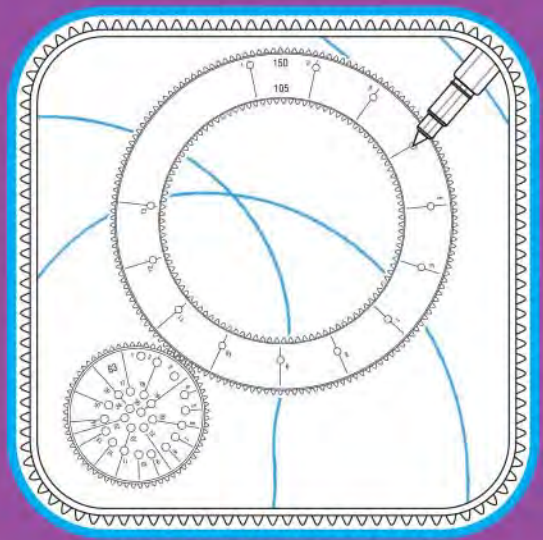
52 • HOLES: 1-10

Leave the RING locked in position on the paper with the SPIRO-PUTTY and align Hole 1 on WHEEL No. 52 with POSITIONING LINE No. 1 on the inside track of the RING. Draw a pattern with the Blue Pen in Hole 1. Align Hole 10 with POSITIONING LINE No. 1 on the RING and draw a pattern with the Red Pen in Hole 10.

• Below are two ways to draw jumbo sized designs.



• Secure a RING to the paper with the SPIRO-PUTTY and revolve a WHEEL around the outside track as shown above.

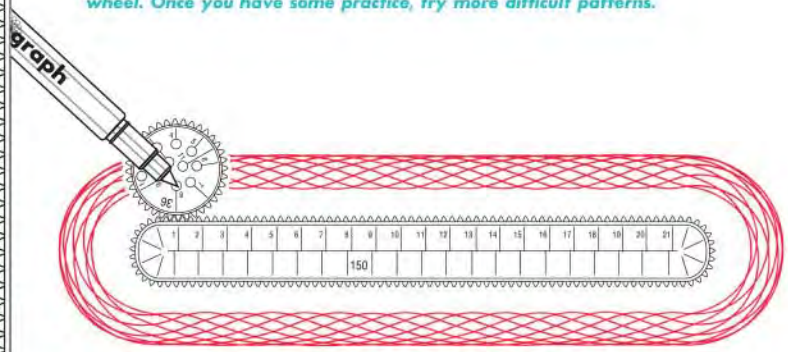


• Secure a WHEEL to the paper with the SPIRO-PUTTY and revolve a RING around the outside of the WHEEL as shown above.

Using a Single Rack

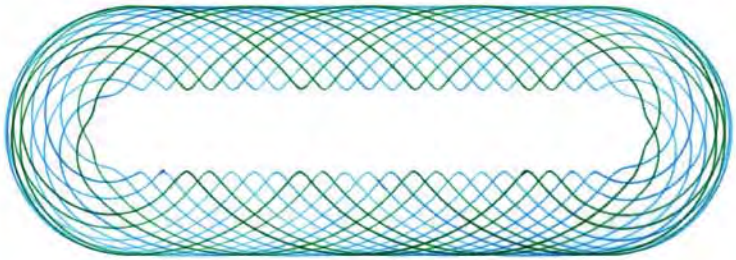
Secure the RACK to the paper with SPIRO-PUTTY and rotate WHEELS and RINGS around the outside to create unique shaped Spirograph® designs.

Note: The small corners of the RACK can be tricky, so be sure to keep the teeth engaged securely as you rotate the WHEELS. Draw slowly and steadily. When first drawing designs with the rack, try using a smaller wheel and a hole that is close to the center of the wheel. Once you have some practice, try more difficult patterns.



150 • 36 • HOLE: 8

Using Hole 8 on WHEEL No. 36, draw a pattern with the Red Pen, starting at POSITIONING LINE 1 on the RACK and ending when your line meets where it began.



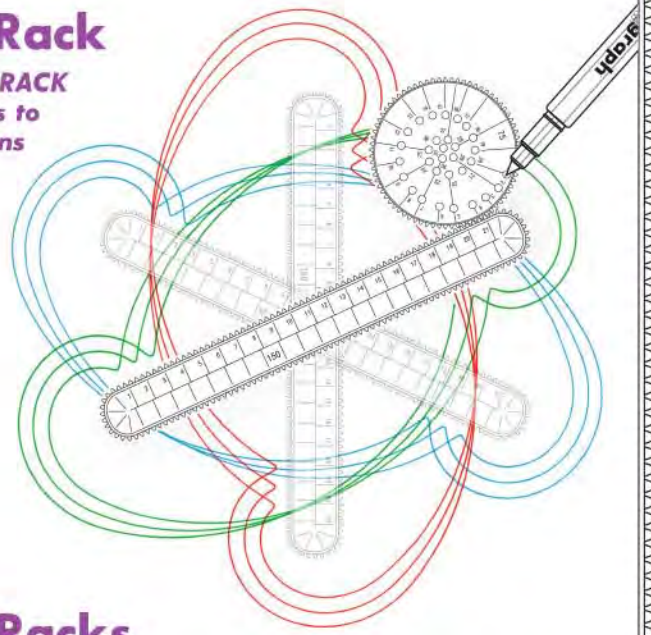
150 • 45 • HOLES: 1-1-1-1-1

Using Hole 1 on WHEEL No. 45, draw three Blue patterns starting at POSITIONING LINES 1, 2, and 20 on the RACK. Then use the Green Pen in Hole 1 to draw two patterns starting at POSITIONING LINES 3 and 4.

Rotating a Rack

Rotate and move the RACK into different positions to create design variations and interesting duplications of patterns.

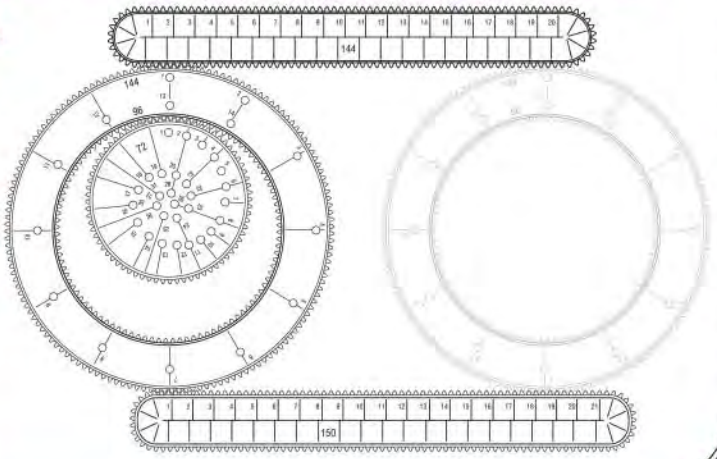
Secure the RACK to the paper with SPIRO-PUTTY and draw a pattern by rotating a WHEEL around the rack. Then, gently remove the rack from the paper, rotate it as shown and stick it down in the new position. Draw the same pattern again. Repeat as desired.



Using Both Racks

To set up for designs using both RACKS, first stick the bottom RACK in place with three pieces of SPIRO-PUTTY. Then line up your RING, move the top RACK into place, and lightly tack down. Next move the RING to the other end of the bottom RACK. Bring the top RACK into place. NOW, firmly press the top rack down to the paper.

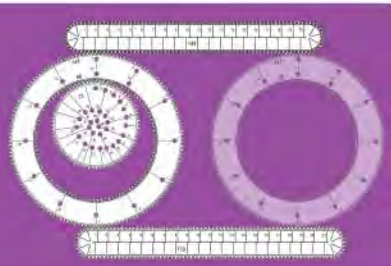
- *Use SPIRO-PUTTY to secure the RACKS but not the RING. You will shift the RING over after drawing each pattern. See the next page for design examples.*
- *When shifting the RING between the RACKS, move just the top first, by one tooth, then move the bottom. This will make it easier to keep track of the number of teeth you have moved.*

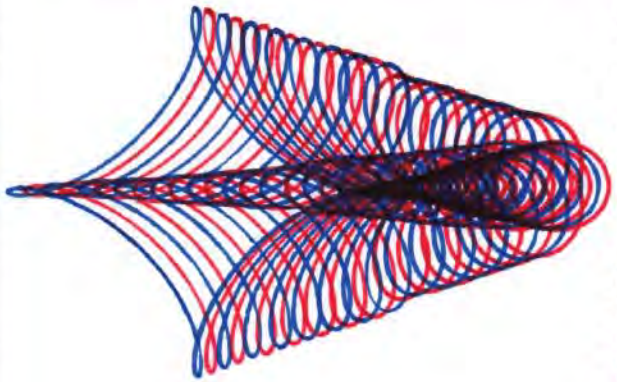


Designs Using Both Racks

Note: All designs on this page use the double-rack setup.

See page 11 for setup instructions.



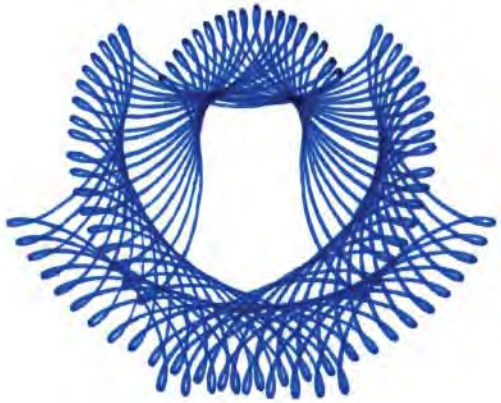


144/96 • 72 •

HOLES: 1 thru 28

Place RING 144 at the left end of the RACKS with POSITIONING LINE No. 1 at the top. Place WHEEL No. 72 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

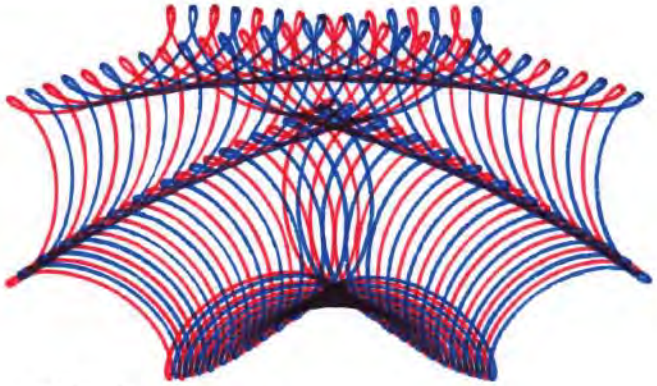
Draw one pattern using the Blue Pen in Hole 1. Shift the RING one tooth to the right, TOP and BOTTOM. Now line up Hole 2 with POSITIONING LINE No. 1 on the RING and draw one pattern using the Red Pen in Hole 2. Continue drawing patterns with Holes 3 thru 28, shifting the RING one tooth to the right for each pattern. Draw the Odd numbered Holes with the Blue Pen and the Even numbered Holes with the Red Pen.



150/105 • 84 • HOLE: 1x18

Place RING 150 at the left end of the RACKS with POSITIONING LINE No. 1 at the top. Place WHEEL No. 84 so that Hole 1 lines up with POSITIONING LINE No. 3 on the RING.

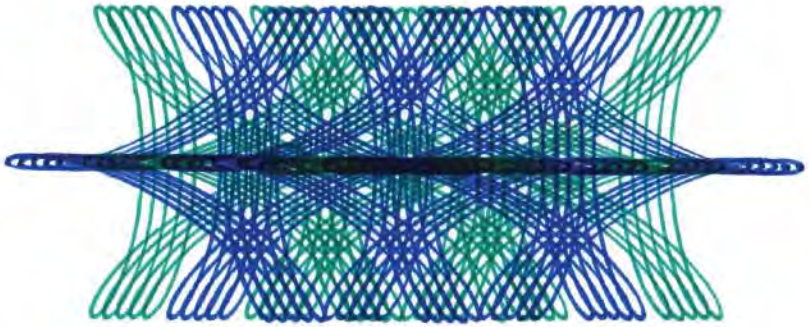
Draw 18 patterns with the Blue Pen in Hole 1, each time moving the RING one tooth to the right along the UPPER RACK, keeping the teeth engaged in the LOWER RACK, and each time moving the WHEEL two teeth to the left inside the RING.



144/96 • 80 • HOLE: 1-1 x12

Place RING 144 at the left end of the RACKS with POSITIONING LINE No. 1 at the top. Place WHEEL No. 80 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING.

Draw 24 designs, alternating Red and Blue, moving the RING two teeth to the right on the TOP RACK every time. Always start each pattern with Hole 1 of the WHEEL lined up with POSITIONING LINE No. 1 on the RING.



144/96 • 64 • HOLE: 1x5, 1x5, 1x5, 1x5,1x5, 1x5, (moving right)
1x5, 1x5, 1x5, 1x5,1x5, 1x5 (moving left)

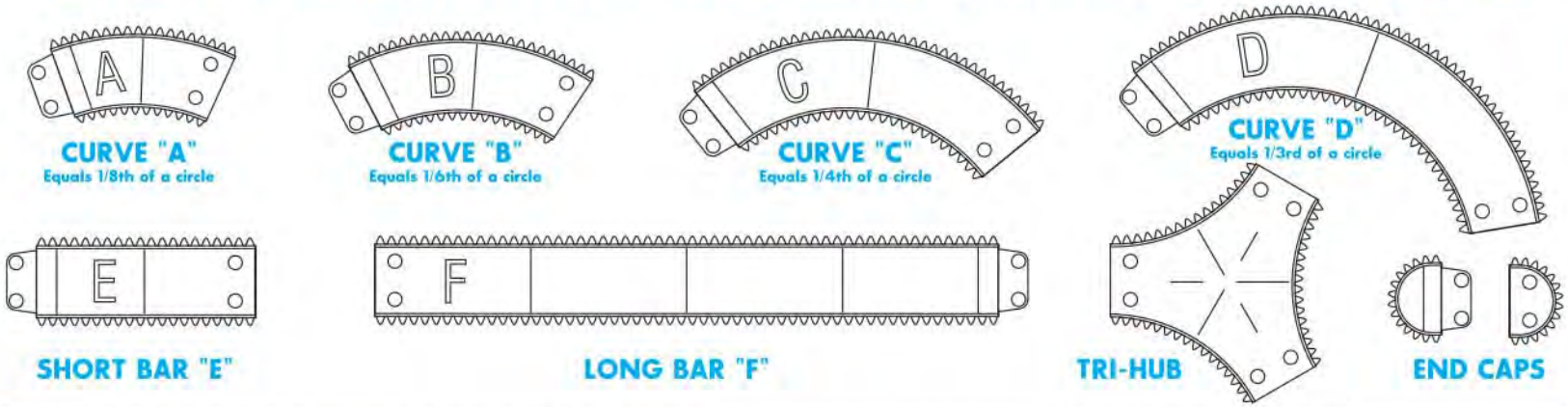
Place RING 144 at the left end of the RACKS with POSITIONING LINE No. 1 at the top. Place WHEEL No. 64 so that Hole 1 lines up with POSITIONING LINE No. 10 on the RING.

Draw 5 Blue patterns with Hole 1, moving the RING one tooth to the right TOP and BOTTOM every time. Then move the RING TWO teeth to the right TOP and BOTTOM. Draw 5 patterns with the Green Pen, moving the RING one tooth to the right TOP and BOTTOM every time. Repeat two more times in each color.

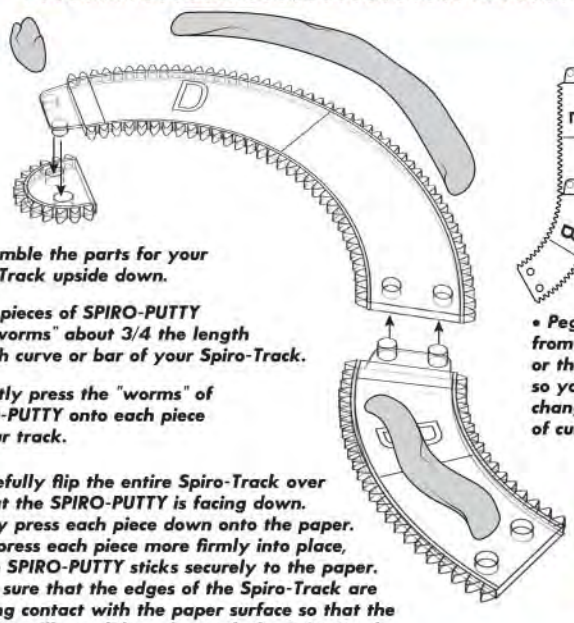
Now reverse the procedure, starting with Hole 1 lined up with POSITIONING LINE No. 4 on the RING. Draw 5 Blue patterns and 5 Green patterns three times, moving the RING to the left this time instead of right.

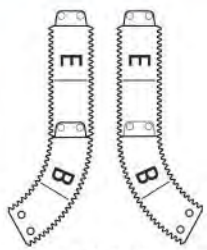
Super Designs with Spiro-Tracks

Spiro-Tracks are interchangeable curves and bars that can be connected to build different-shaped tracks for Super Designs!



Setting up Spiro-Tracks





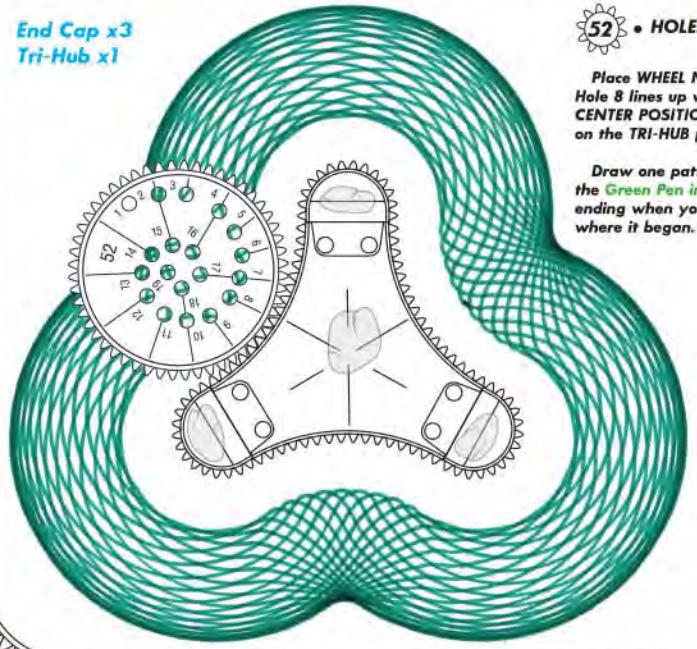
- ***Assemble the parts for your Spiro-Track upside down.***
- ***Roll pieces of SPIRO-PUTTY into "worms" about 3/4 the length of each curve or bar of your Spiro-Track.***
- ***Gently press the "worms" of SPIRO-PUTTY onto each piece of your track.***
- ***Carefully flip the entire Spiro-Track over so that the SPIRO-PUTTY is facing down. Gently press each piece down onto the paper. Now press each piece more firmly into place, so the SPIRO-PUTTY sticks securely to the paper. Make sure that the edges of the Spiro-Track are making contact with the paper surface so that the WHEELS will not slide underneath the Spiro-Track.***

- ***Pegs fit in the holes from either the top or the bottom, so you can easily change the direction of curves.***

HINT: Use the jumbo paper sheets included in this kit to draw your Super Designs.

Designs on the Outside of Tracks

End Cap x3
Tri-Hub x1



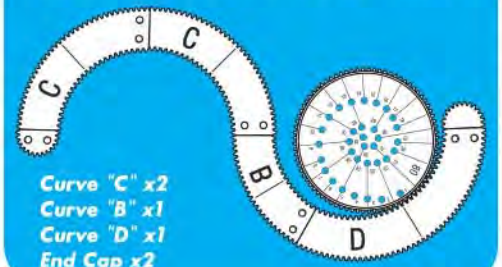
52 • ***HOLE: 8***

Place WHEEL No. 52 so that Hole 8 lines up with a CENTER POSITIONING LINE on the TRI-HUB piece.

Draw one pattern using the Green Pen in Hole 8, ending when your line meets where it began.

Designs on the Outside of Tracks

Spiro-Track Diagram: Open Curve

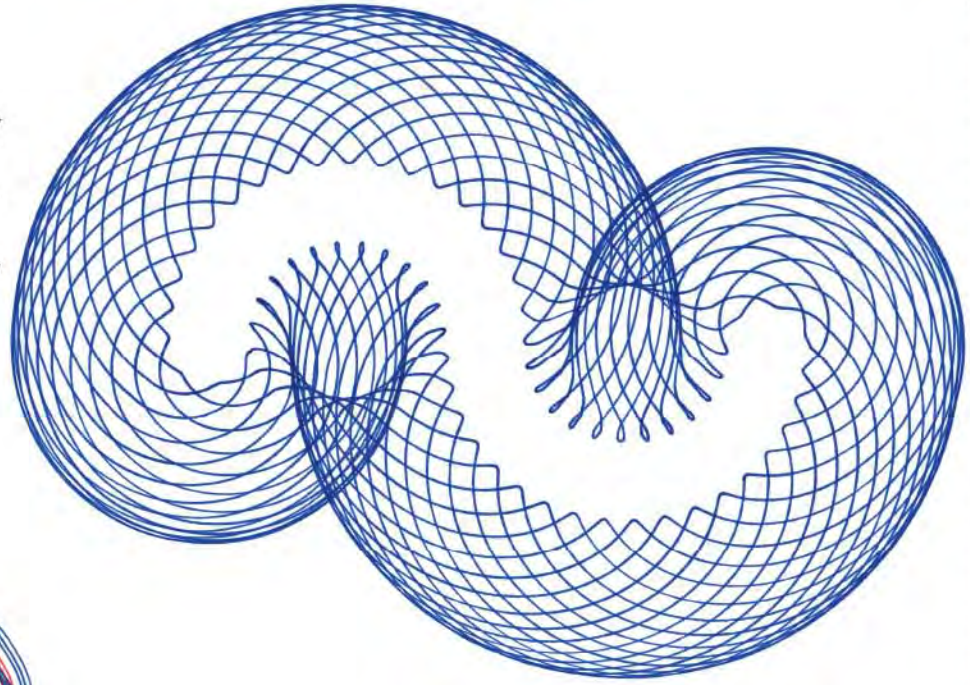


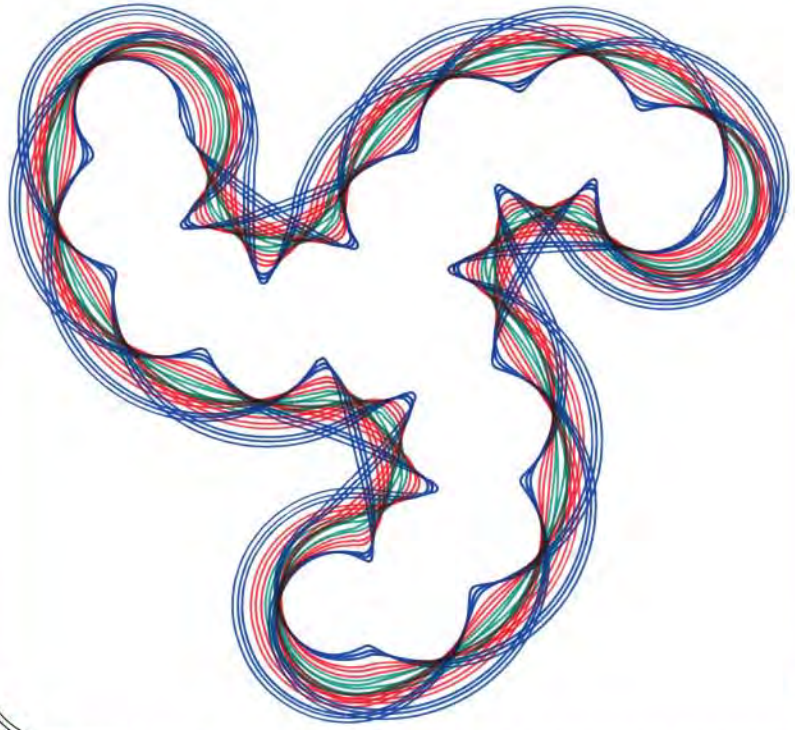
Curve "C" x2
Curve "B" x1
Curve "D" x1
End Cap x2

80 • **HOLE: 1**

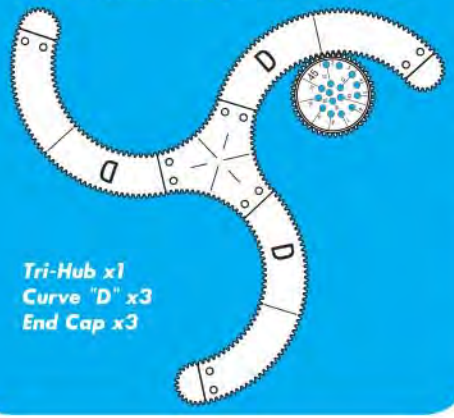
Place WHEEL No. 80 so that Hole 1 lines up with any CENTER POSITIONING LINE. Draw one pattern with the Blue Pen in Hole 1, ending when your line meets where it began.

For this design you may want to use your other hand to help guide the WHEEL, especially around the ends of the track, so that the teeth stay engaged while going around the sharp curves.





Spiro-Track Diagram: Propeller



Tri-Hub x1
Curve "D" x3
End Cap x3

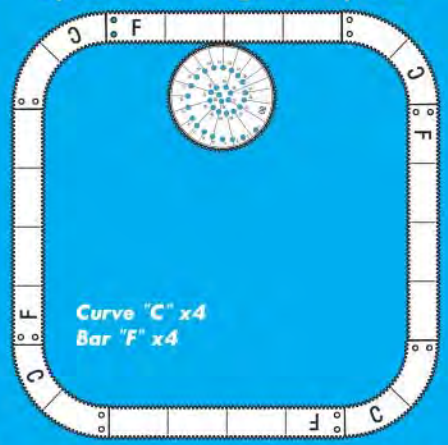
45 • **HOLES: 1-3-5-9-11-13-15-17**

Place WHEEL No. 45 so that Hole 1 lines up with the CENTER POSITIONING LINE of any one of the "D" curves. Draw one pattern with the Blue Pen in Hole 1, ending when your line meets where it began.

Align Hole 3 with the same positioning line and draw a pattern with the Blue Pen in Hole 3. Repeat with the Blue Pen in Hole 5, then the Red Pen in Holes 9-11-13 and the Green pen in Holes 15-17, each time starting with the new hole lined up with the same positioning line.

Designs on the Inside of Tracks

Spiro-Track Diagram: Square



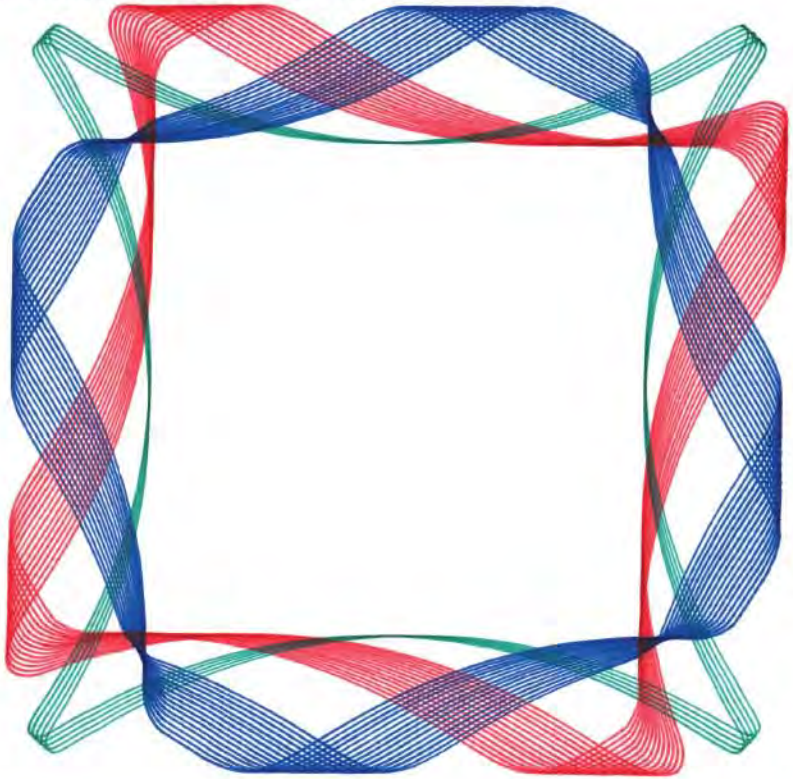
80 • **HOLES:** 15 x15
15 x14
15 x5

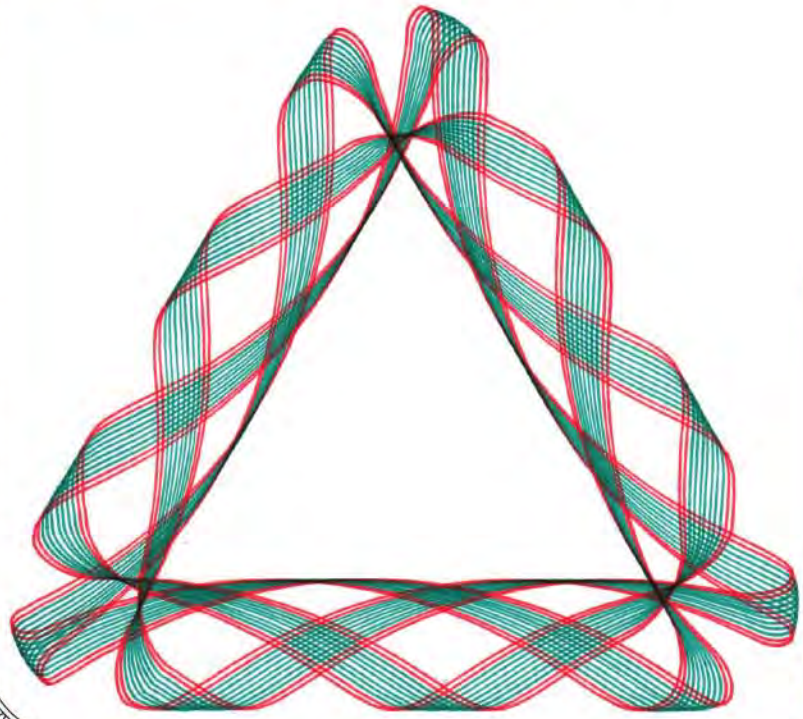
Place WHEEL No. 80 so that Hole 15 lines up with the CENTER POSITIONING LINE on the top BAR "F".

Draw 15 patterns with the Blue Pen in Hole 15, moving one tooth to the right for each pattern.

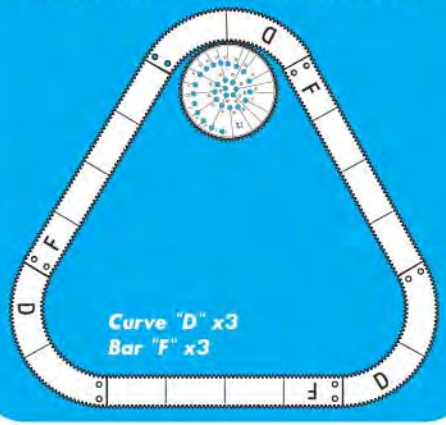
Place the Wheel so that Hole 15 lines up with the LEFT POSITIONING LINE on the top BAR "F". Draw 14 patterns with the Red Pen in Hole 15, moving one tooth to the left for each pattern.

Place the Wheel so that Hole 15 lines up three teeth to the left of the CENTER POSITIONING LINE on the top left CURVE "C". Draw 5 patterns with the Green Pen in Hole 15, moving one tooth to the right for each pattern.





Spiro-Track Diagram: Triangle

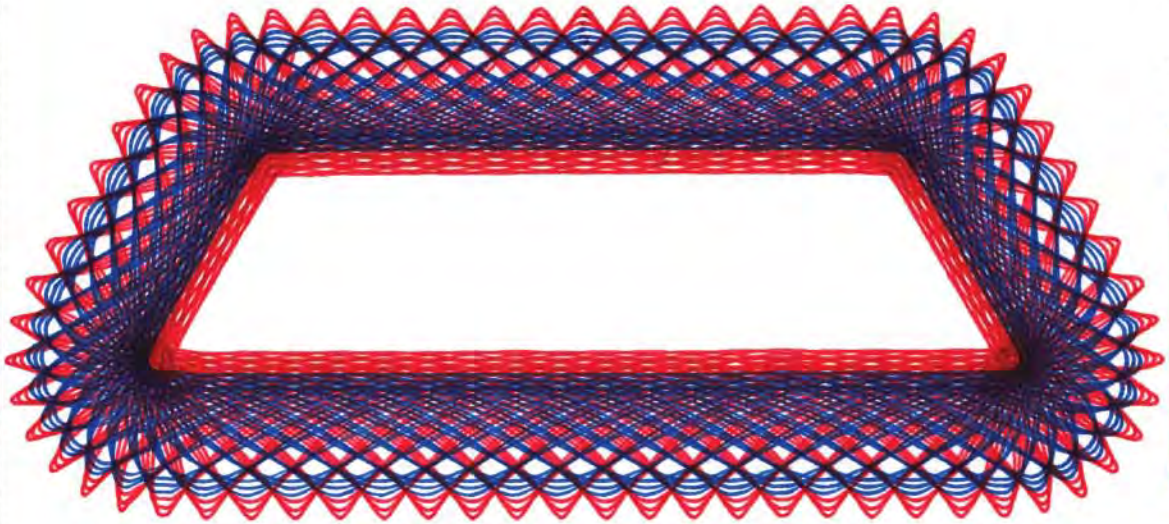


72 • **HOLES:** 12-12-12-12-12-12
12-12-12-12-12

Place WHEEL No. 72 so that Hole 12 lines up with the CENTER POSITIONING LINE on the top CURVE "D".

Draw 4 patterns using the Green Pen in Hole 12, and then 2 patterns with the Red Pen in Hole 12, moving your starting position one tooth to the right for each pattern.

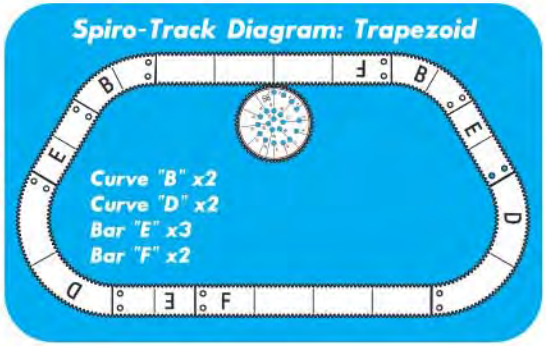
Place the Wheel so that Hole 12 lines up one tooth to the left of the CENTER POSITIONING LINE on the top CURVE "D". Draw 3 more Green patterns and then 2 more Red patterns, this time moving one tooth to the left each time.

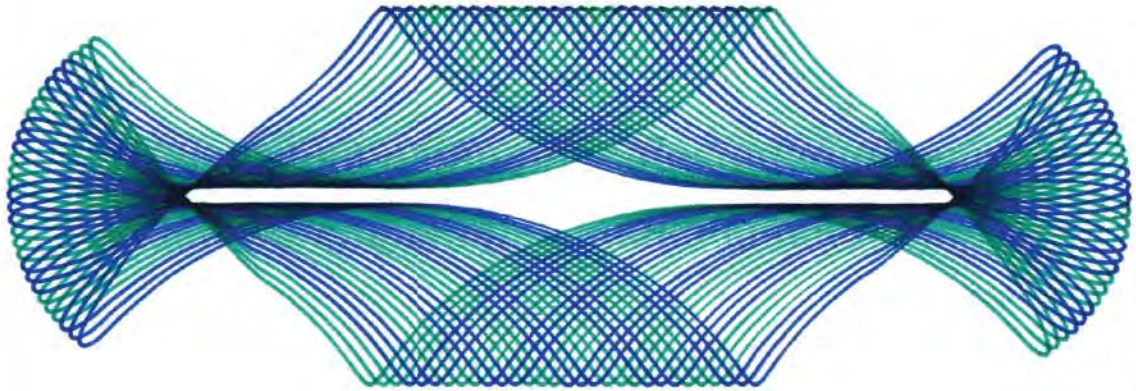


56 • ***HOLES:*** *1-3-5-7-9-11*

Place WHEEL No. 56 so that Hole 1 lines up with the CENTER POSITIONING LINE on the top BAR "F".

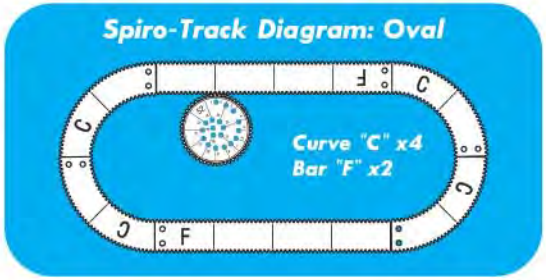
Draw patterns with the Red Pen in Holes 1-3-5, and the Blue Pen in Holes 7-9-11, starting each pattern with the new hole lined up with the CENTER POSITIONING LINE on the top BAR "F".





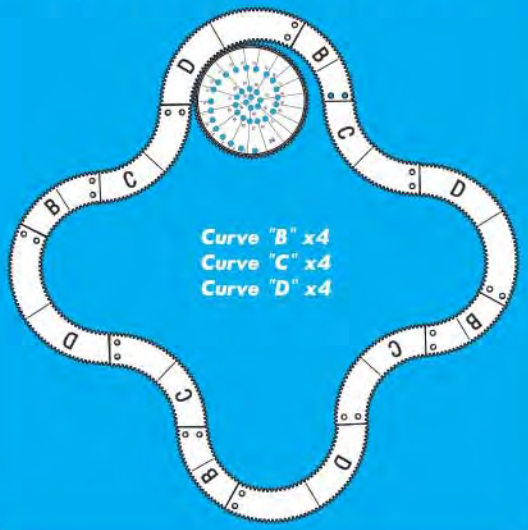
52 • ***HOLES:*** *1x3, 1x3*
1x3, 1x3
1x3, 1x3
1x3, 1x3
1x3, 1x3

Place WHEEL No. 52 so that Hole 1 lines up with the LEFT POSITIONING LINE on the top BAR "F". Draw 3 patterns with the Blue Pen in Hole 1, and then 3 patterns with the Green Pen in Hole 1, moving your starting position one tooth to the right for each pattern. Repeat 4 more times for a total of 30 patterns.



Designs on the Inside of Tracks

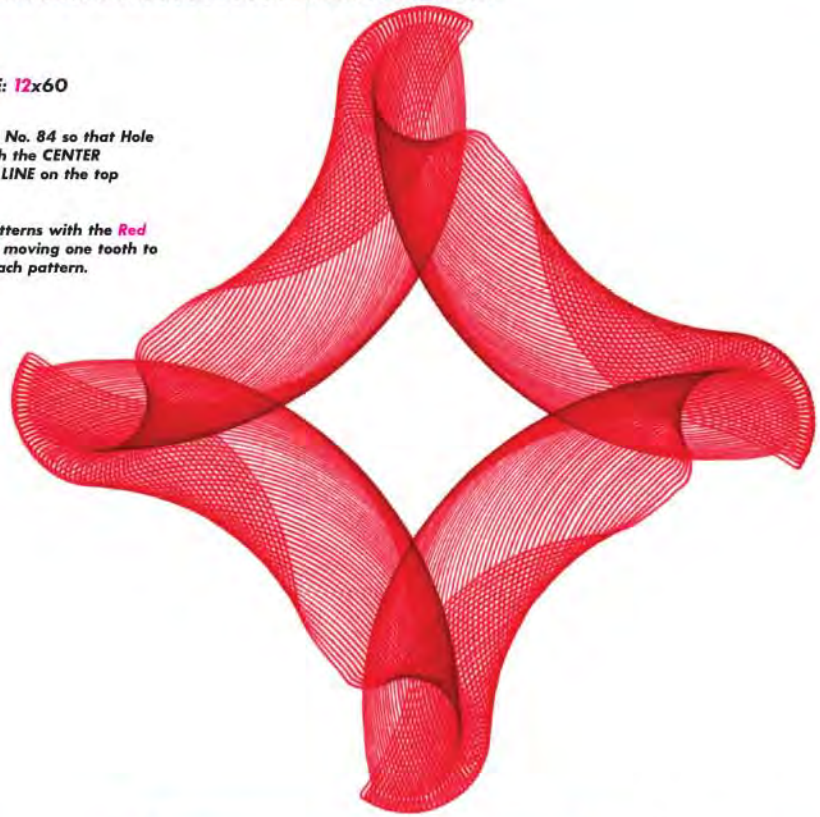
Spiro-Track Diagram: Cloverleaf

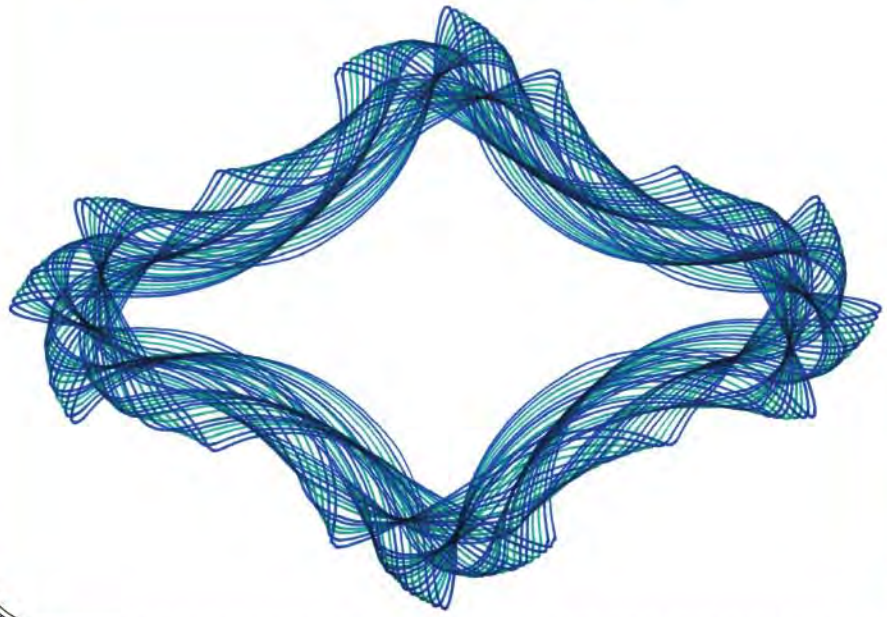


84 • **HOLE: 12x60**

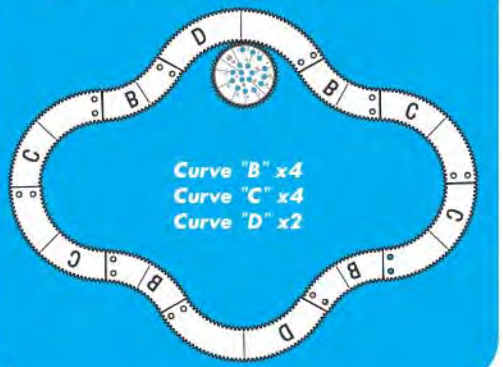
Place WHEEL No. 84 so that Hole 12 lines up with the CENTER POSITIONING LINE on the top CURVE "D".

Draw 60 patterns with the Red Pen in Hole 12, moving one tooth to the right for each pattern.





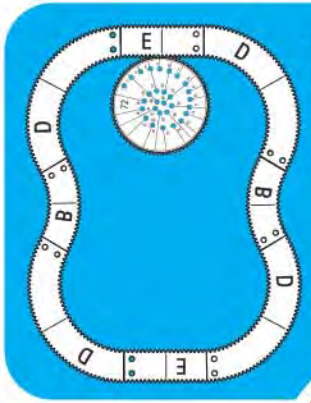
Spiro-Track Diagram: Wide Clover



48 • **HOLES: 1-2-3-4-5-6 7-8-9-10-11-12-13-14**

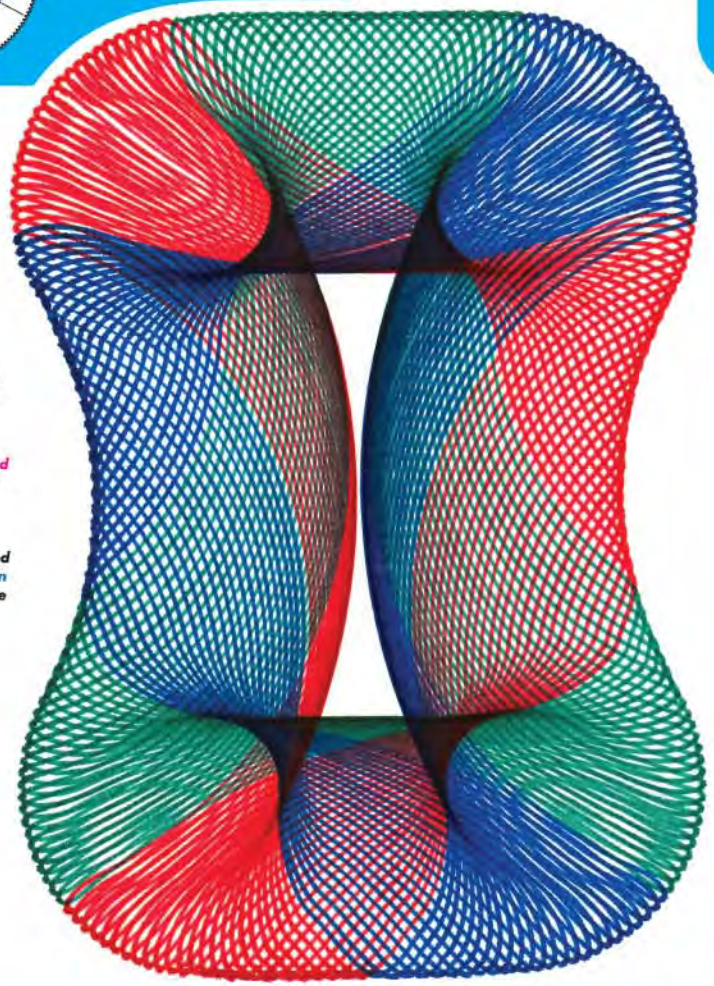
Place WHEEL No. 48 so that Hole 1 lines up with the CENTER POSITIONING LINE on the top CURVE "D".

Draw a pattern with the Blue Pen in Hole 1. For each new pattern, shift one tooth to the right and advance one hole of the WHEEL. Switch colors from Blue to Green every two patterns.



Spiro-Track Diagram: Hourglass

Curve "B" x2
Curve "D" x4
Bar "E" x2

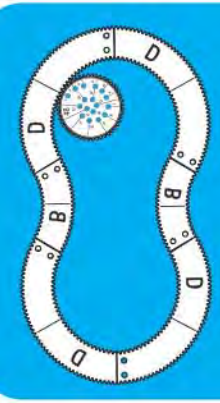


72 • **HOLES:** 5x24
5x24
5x24

Place WHEEL No. 72 so that Hole 5 lines up with the CENTER POSITIONING LINE of the top SHORT BAR "E".

Draw 24 patterns with the Red Pen in Hole 5, moving one tooth to the right for each pattern.

Then draw 24 patterns with the Green Pen in Hole 5, followed by 24 patterns with the Blue Pen in Hole 5, continuing to move one tooth to the right for each pattern.



Spiro-Track Diagram: Peanut

Curve "B" x2
Curve "D" x4

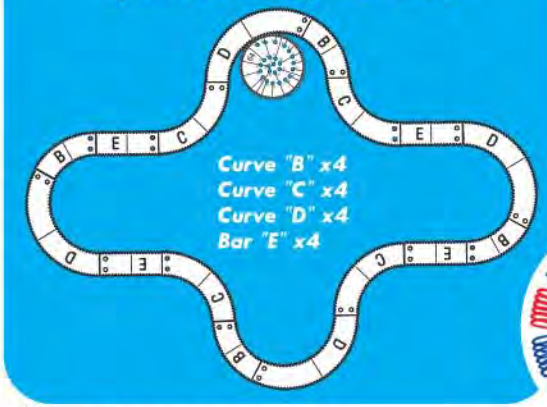
48 • **HOLES:** 1-2-3-4-5
6-7-8-9

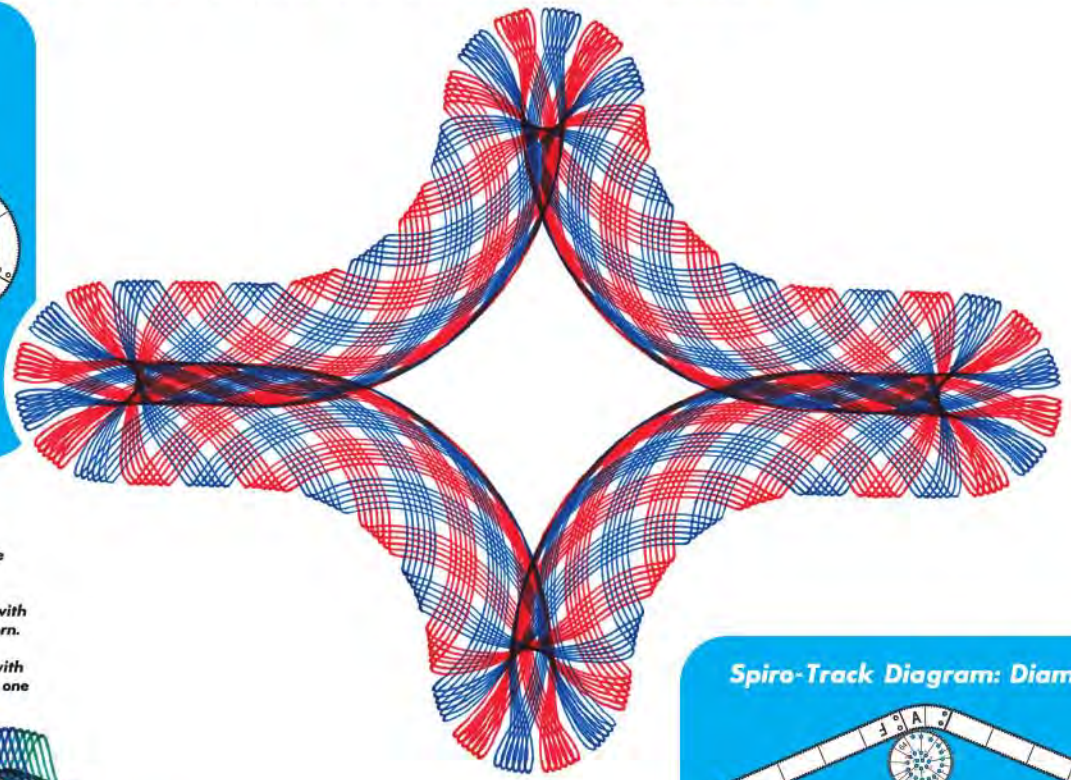
Place WHEEL No. 48 so that Hole 1 lines up with the CENTER POSITIONING LINE of the top left CURVE "D".

Draw patterns with the Red Pen in Holes 1-2-3-4-5-6-7-8-9, moving one tooth to the right for each pattern.

Designs on the Inside of Tracks

Spiro-Track Diagram: Cross



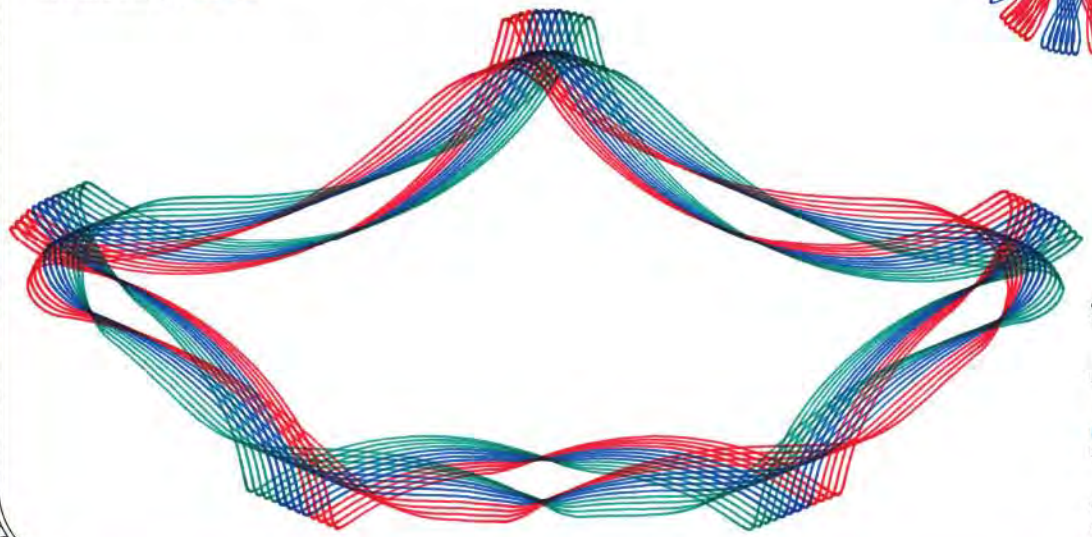


64 • **HOLES:** 1x6, 1x6, 1x6, 1x6

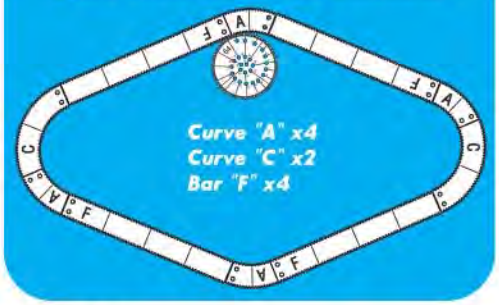
Place WHEEL No. 64 so that Hole 1 lines up with the CENTER POSITIONING LINE of the top CURVE "D". Draw 6 patterns with the Red Pen in Hole 1, moving one tooth to the right for each pattern.

Then move the wheel three teeth to the right. Draw 6 patterns with the Blue Pen in Hole 1, moving one tooth to the right for each pattern.

Move three teeth to the right again and draw 6 more patterns with the Red Pen, again moving one tooth to the right for each. Repeat one more time with the Blue Pen.



Spiro-Track Diagram: Diamond



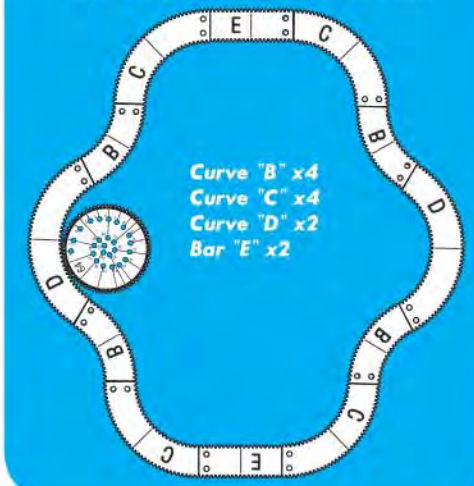
64 • **HOLES:** 1x4, 1x4, 1x4
16x4, 16x4, 16x4

Place WHEEL No. 64 so that Hole 1 lines up six teeth to the left of the CENTER POSITIONING LINE on the top CURVE "A".

Draw 4 patterns with the Red Pen in Hole 1, then 4 patterns with the Blue Pen in Hole 1, then 4 patterns with the Green Pen in Hole 1, moving one tooth to the right for each pattern.

Then place the wheel so that Hole 16 lines up twelve teeth to the left of the CENTER POSITIONING LINE. Repeat the above procedure, drawing 4 patterns each with the Red, Blue and Green pens in Hole 16, but move TWO teeth to the right after each pattern.

Spiro-Track Diagram: Frame



64 • **HOLE: 1x6**

Place WHEEL No. 64 so that Hole 1 lines up three teeth to the left of the CENTER POSITIONING LINE of the Left CURVE "D". Draw 6 patterns with the Blue Pen in Hole 1, moving one tooth to the right for each pattern.

144/96 • **84** • **HOLES: 1-2-3-4-5**
1-2-3-4-5
21x5, 25x5, 32

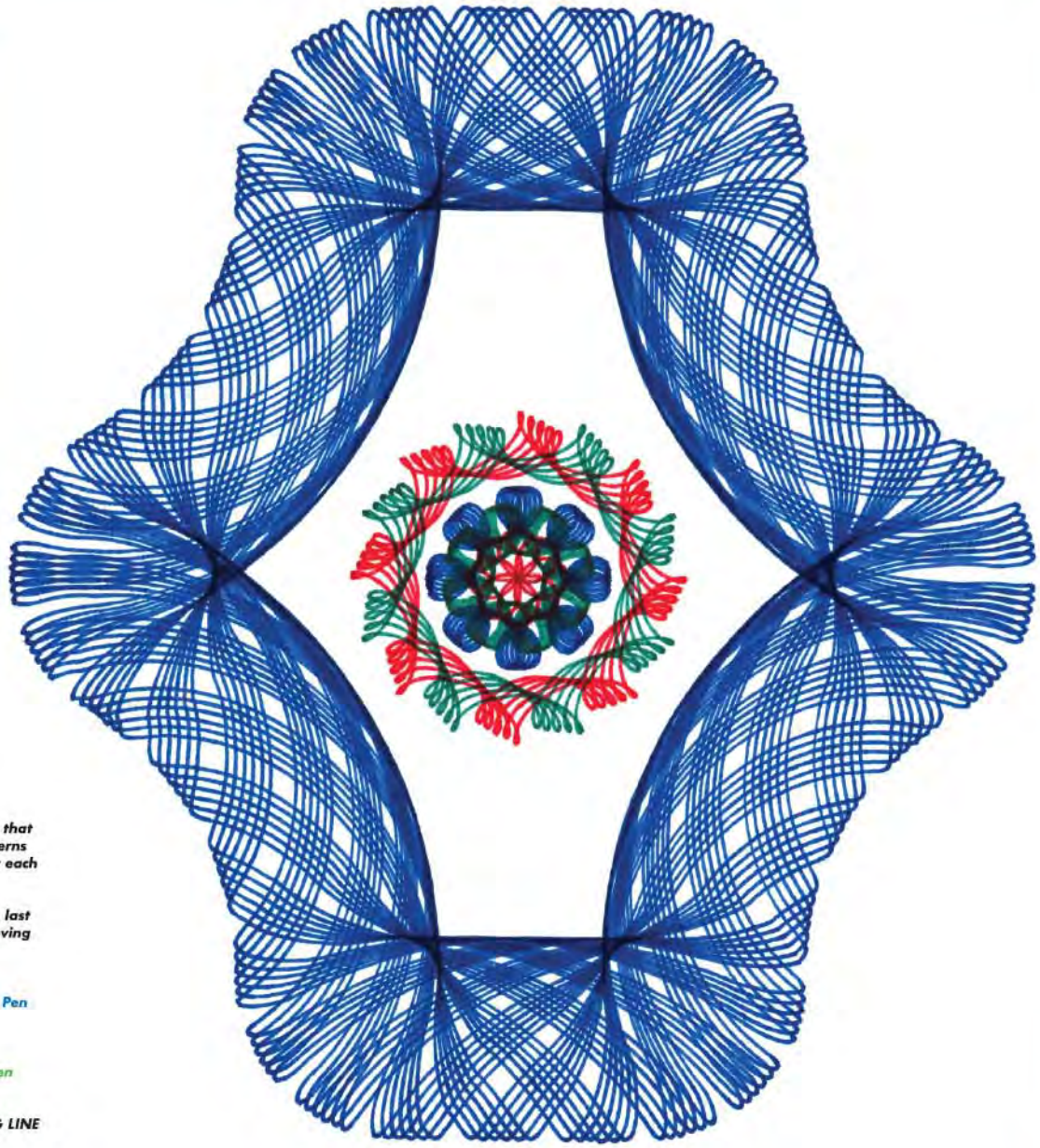
Set up RING 144/96 in the center of the design. Place WHEEL No. 84 so that Hole 1 lines up with POSITIONING LINE No. 1 on the RING. Draw patterns with the Red Pen in Holes 1-2-3-4-5, moving one tooth to the right for each pattern.

Move the wheel so that Hole 1 lines up two teeth to the right of the last red pattern. Draw patterns with the Green Pen in Holes 1-2-3-4-5, moving one tooth to the right for each pattern.

Move the wheel so that Hole 21 lines up two teeth to the left of POSITIONING LINE No. 1 on the RING. Draw 5 patterns with the Blue Pen in Hole 21, moving one tooth to the right for each pattern.

Move the wheel so that Hole 25 lines up two teeth to the left of POSITIONING LINE No. 2 on the RING. Draw 5 patterns with the Green Pen in Hole 25, moving one tooth to the right for each pattern.

Finally, move the wheel so that Hole 32 lines up with POSITIONING LINE No. 1 on the RING. Draw one pattern with the Red Pen in Hole 32.

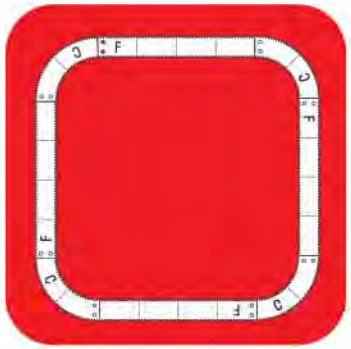


Super Spirograph® Pattern Guide

The patterns below were drawn with the pen in Hole No. 1 of each WHEEL.

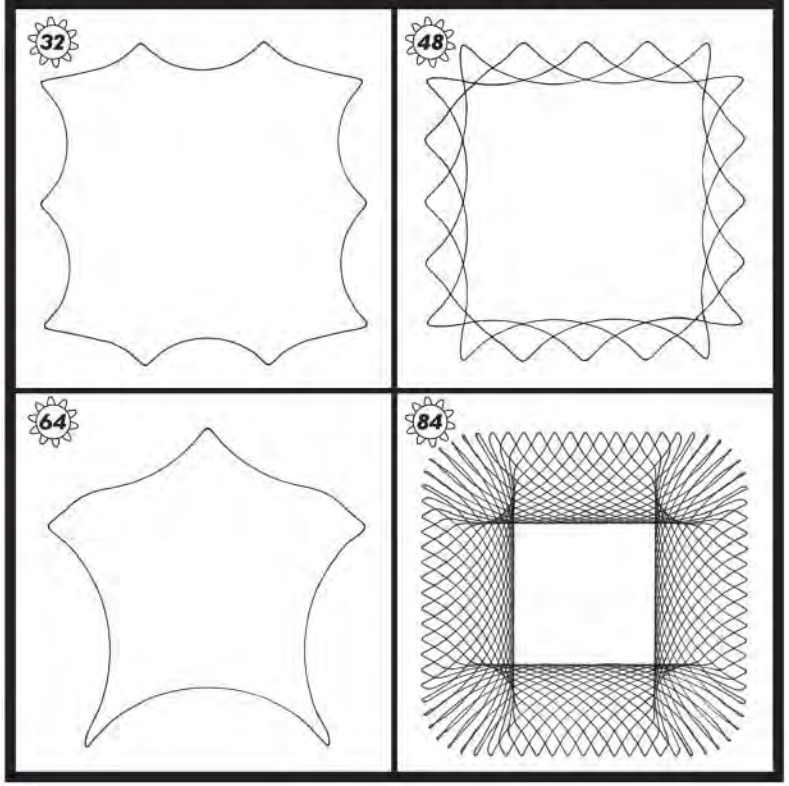
= **WHEEL used to create pattern**

Curve "C" x4
Bar "F" x4

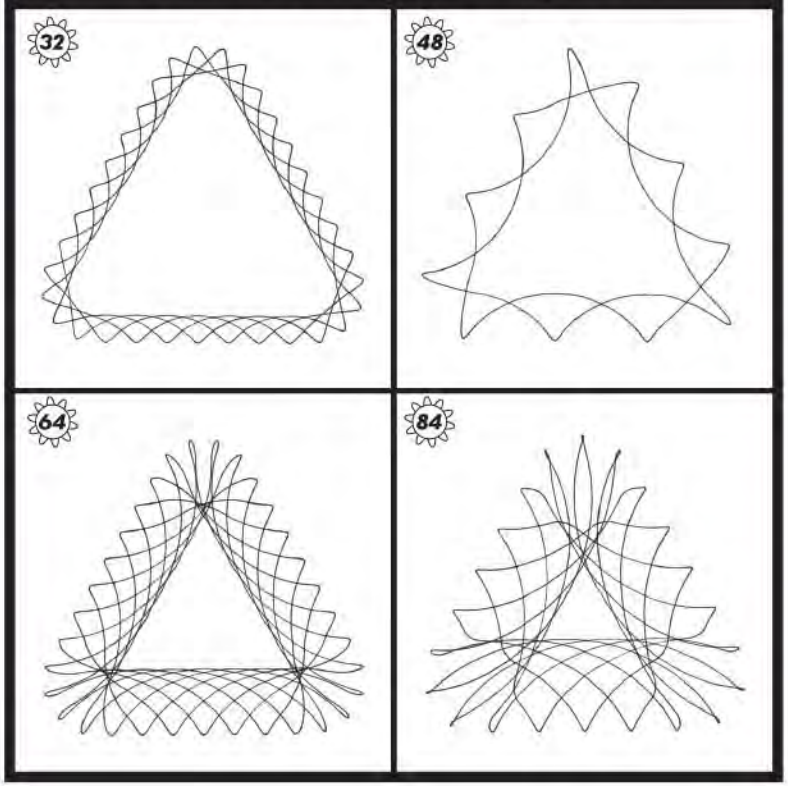


Curve "D" x3
Bar "F" x3

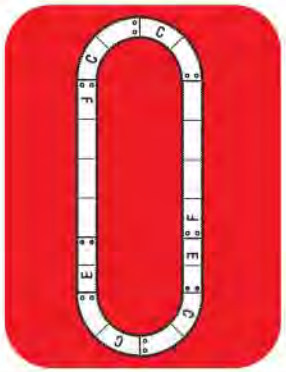
Patterns created using the square track



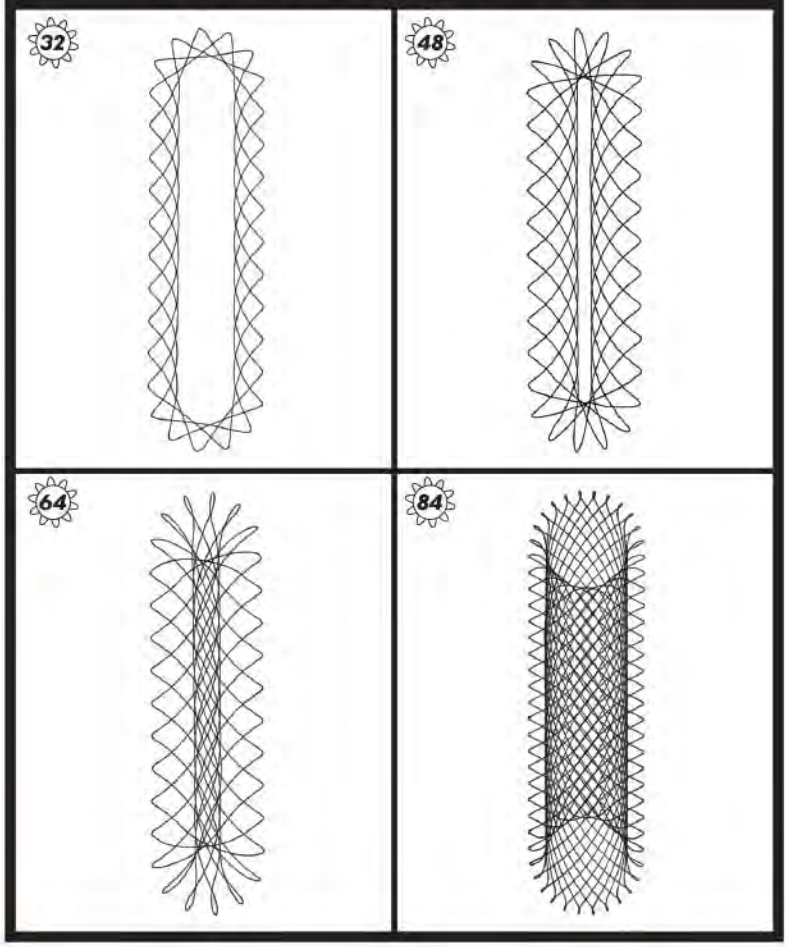
Patterns created using the triangle track



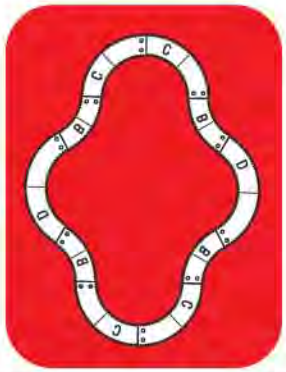
Curve "C" x4
Bar "E" x2
Bar "F" x2



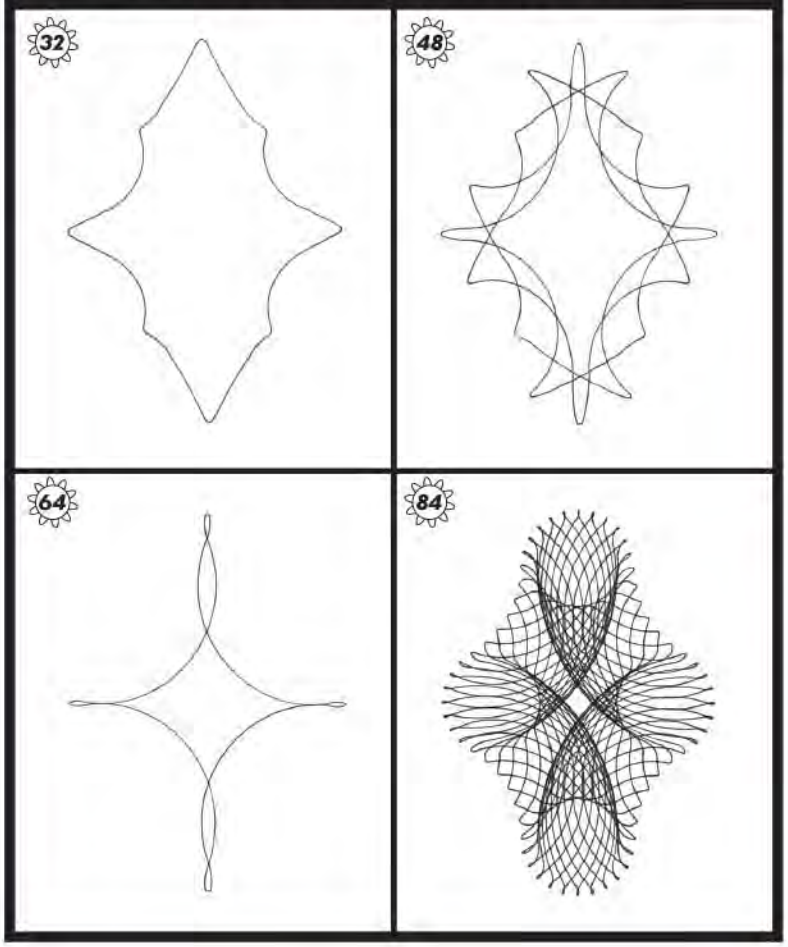
Patterns created using the oval track



Curve "B" x4
Curve "C" x4
Curve "D" x2



Patterns created using the wide clover track



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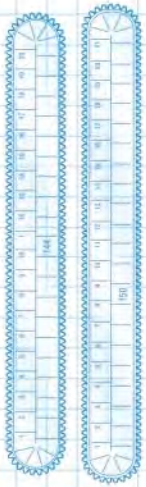
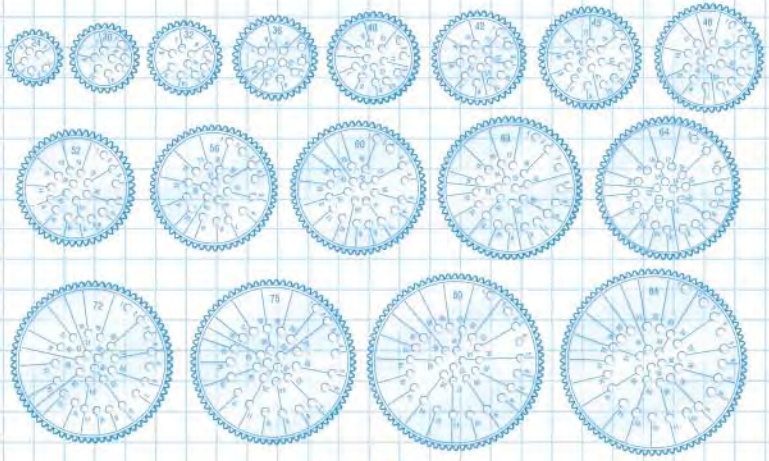
COLLECTIBLE DIE-CAST #50 golden wheel!

50th anniversary limited edition design set!

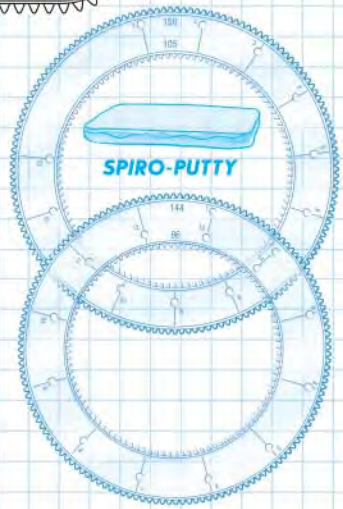
3 PENS



2 RACKS



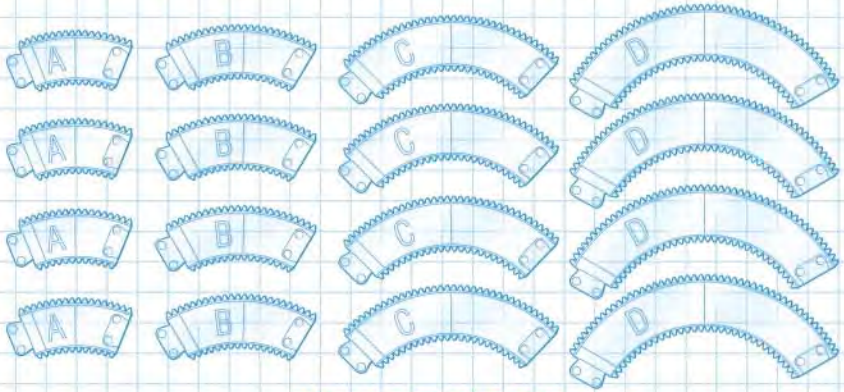
18 WHEELS



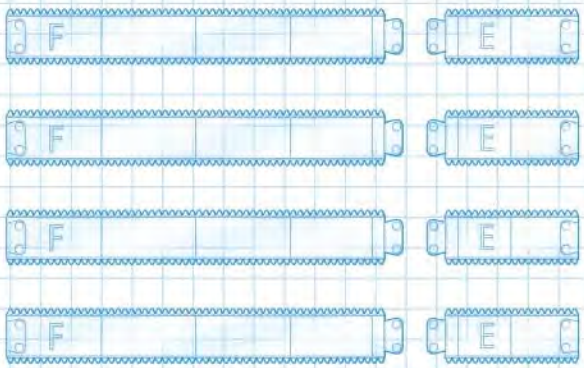
SPIRO-PUTTY

2 RINGS

4 SHAPED WHEELS



16 CURVED SPIRO-TRACKS



8 STRAIGHT SPIRO-TRACKS

TRI-HUB

6 END CAPS

from those guys in... KaHOOTZ

AGES 8+

- To avoid damage/indentation on wood surfaces, please use the work surface provided in your reusable case when drawing Spirograph® designs, or place a protective layer such as a placemat or a pad of paper, underneath your drawing area . Spirograph® pen inks may stain some surfaces and fabrics.
- Spiro-Putty and Spirograph® pen inks have been evaluated and approved by a board certified toxicologist.
- Spiro-Putty can be removed from most surfaces and is also reusable. It is designed to be used as intended with paper and the included Spirograph® components, and should be stored properly in the case between uses. Avoid contact with wallpaper, delicate surfaces, walls painted with flat paint and carpet.
- The Spirograph® pieces have been designed to accommodate most types of pens, pencils and markers found in the market.

We recommend using **PENS WITH A POINT SIZE OF 1mm OR SMALLER**.

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