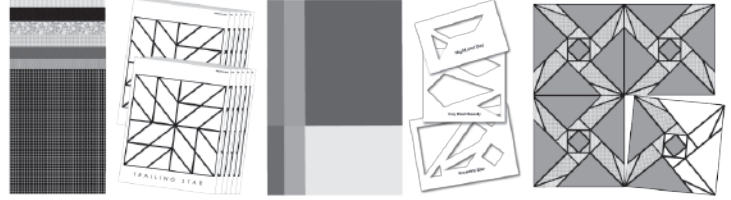


No. 22050

Geo-Quilts

These fun quilt blocks are a great craft to go with many subjects: history, geometry and, of course, art. This kit contains reproducible line drawings of each quilt pattern, stencils of each shape contained in the patterns and a variety of papers for making quilt blocks



We have selected 28 diverse quilt blocks for this kit. Below is a list of blocks with the shapes included in each pattern. Use these or create your own blocks. Hint: the internet is a great resource to find quilt blocks.

BLOCKS

Quilt blocks are the easiest way to make a quilt. Blocks break down the work of a big project into smaller, easier-to-work-with pieces. They are also very interesting because when you piece the blocks together they sometimes form a secondary pattern in the quilt. Quilt blocks were useful on the frontier because they saved time and space.

GEOMETRY

Geometry is also an important part of quilt blocks; most of the shapes are basic geometric shapes. These shapes are used to create many various patterns and some even create optical illusions. A polygon is the most versatile geometric shape; it is a shape where sides meet to form corners. There are two basic types of polygons: regular, which means all internal angles are the same and each side is the same length, and irregular, which means that all the angles and sides are not the same. On a reproducible sheet we have listed the twenty shapes with pictures included in this kit.

HISTORY

Quilting started in Europe but became very popular and developed into an art form in the New World. Pioneers in America were very isolated and needed simple solutions to their problems. One problem was that they needed bedcovers, but cloth was expensive. They ingeniously salvaged scrap pieces of fabric and pieced them together to make quilts. Block names came from designers of blocks, current events or famous people and places.

COLOR

To match and contrast colors for your blocks it is very helpful to make a color wheel. You can also find one online or in a book. Colors are in a warm range: reds, oranges and purples, and a cool range: blues and greens. Note: dark colors advance toward the eye and light colors retreat. It is also helpful to note the difference between hue and value of colors.

Hue: the position of a color on the color wheel

Value: the lightness or darkness of a color on a scale from black to white

Tumbling Blocks: rhombus.

Balkan Puzzle: right triangle.

Card Trick: 2 right triangles.

Kaleidoscope: right triangle; isosceles triangle.

Melon Patch: square, vesica piscis.

Night and Day: right triangle, trapezoid.

Trailing Star: right triangle, parallelogram.

Virginia Star: square, right triangle, rhombus.

Cat's Cradle: 2 right triangles, square.

Churn Dash: square, rectangle, right triangle.

Fifty-Four-Forty or Fight: isosceles triangle, right triangle; square

Key West Beauty: isosceles triangle, rhombus; kite

Bleeding Hearts: square, astroid, irregular vesica piscis; half arbelos

Grandmother's Choice: 2 right triangles, square, rectangle

Nocturne: square, rectangle, irregular quadrilateral; circular sector

Prairie Flower: right triangle, square, irregular pentagon, irregular hexagon

Swing in the Center: irregular pentagon, 2 right triangles, rhombus

Friendship Star: hexagon, square, isosceles triangle, irregular pentagon

Amish Style: 3 right triangles, rhombus, trapezoid

Cross and Crown: 2 right triangles, square, rectangle, trapezoid

The Road to Paradise: 3 right triangles, rhombus, isosceles triangle

Pine Tree: 3 right triangles, square, irregular pentagon

Four-Patch Weave: right triangle, square, rectangle, 2 trapezoids

Northumberland Star: 3 right triangles, square, rhombus

Virginia Reel: 5 right triangles, rhombus

Eccentric Star: 3 right triangles, square, rhombus, obtuse triangle

Dogtooth Violet: 2 rhombi, 2 right triangles, scalene triangle, isosceles triangle

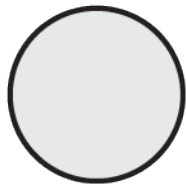
Prosperity Block: 2 right triangles, rectangle, parallelogram, 2 trapezoids, octagon

See reverse for assembly instructions as well as explanations for the geometric shapes included.



Assembly instructions:

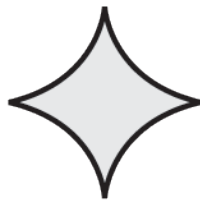
- 1) Choose a pattern from the 28 reproducible designs and gather its corresponding stencil.
- 2) Choose several solid color sheets as well as several patterned sheets to use for your design.
- 3) Make copies of the reproducible design sheet and mark each shape with a number that you will choose to represent a pattern or color you have chosen.
- 4) Using the stencil, draw out your shapes on the patterned or solid sheets. Tip: to make a mirror image of a certain shape, simply flip the stencil over and trace the reverse side.
- 5) Once you have all of your shapes traced, simply cut and paste the shapes in place on the copied design sheets.
Tip: try different color arrangements with the same pattern to make unique quilt designs.



Circle: a shape in which all points are the same distance from the center



Circular Sector: a portion of a circle enclosed by two radii and an arc



Astroid: a four-pointed shape made of inward circular arcs



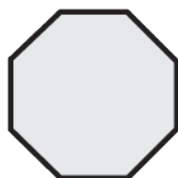
Vesica Piscis: a shape made from two outward circular arcs joined at the points



Pentagon: a five sided polygon



Hexagon: a six-sided polygon



Octagon: an eight sided polygon



Isosceles Triangle: a three-sided polygon with two sides of equal length



Obtuse Triangle: a three-sided polygon with one internal angle measuring more than ninety degrees



Right Triangle: a three-sided polygon where one angle measures ninety degrees



Scalene Triangle: a three sided polygon where all three sides and internal angles are different



Quadrilateral: a four sided polygon



Kite: a quadrilateral where two sides which form a corner are the same length and likewise with the other two sides



Parallelogram: a quadrilateral with two sets of parallel sides



Rectangle: a quadrilateral with four right angles



Rhombus: a quadrilateral with all four sides the same length; also known as a diamond



Square: a quadrilateral where all four sides are the same length and all four angles measure ninety degrees



Trapezoid: a quadrilateral where two opposite sides are parallel



Annulus: ring shaped figure; the area between 2 concentric circles



Arbelos: a region bounded by a semicircle of diameter 1, connected to semicircles of diameters r and $(1 - r)$