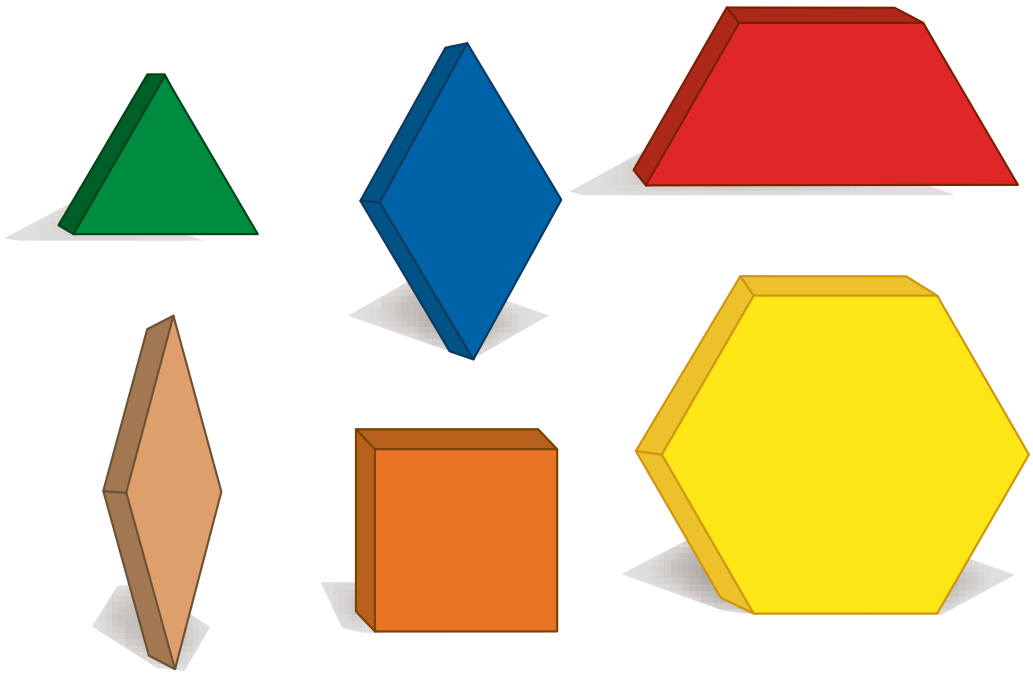
Math Tasks
with Pattern Blocks



Allignments

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ACTIVITIES - 86584

Page	Activity Name	Description	Math Strand	Topics
12	**Mirror Me**	In this activity, Students explore line reflective symmetry by working with a partner to create mirror images using a chosen line of symmetry, or reflection.	Problem Solving, Communication, Reasoning, Connections, Geometry	Line Symmetry, Matching Shapes, Transformational Geometry
16	**Boats and Boxes**	In this game for two players, Students work together using Pattern Blocks to model a problem involving the number of "boats" needed to carry a given number of “boxes.”	Problem Solving, Communication, Reasoning, Connections, Measurement, Number, Patterns/Functions	Area, Counting, Division
20	**Building Congruent Hexagons**	Students search to find all possible combinations of Pattern Blocks that can be used to build shapes that are congruent to the original.	Problem Solving, Communication, Reasoning, Connections, Geometry	Congruence, Equivalence, Spatial Visualization
24	**A Seat at the Table**	In this activity, Students explore perimeter by using one set of six Pattern Blocks to create shapes with different perimeters. Using the side length to indicate how many people can be seated at the table, they will use Pattern Blocks to create tables that can seat many people or just a few.	Problem Solving, Communication, Reasoning, Connections, Geometry	Perimeter, Matching Shapes, Transformational Geometry
28	**Riddle Makers**	Students create riddles that provide clues about Pattern Blocks that they have hidden in a paper bag. They then try to solve each other’s riddles.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic	Deductive Reasoning, Properties of Geometric Figures, Spatial Visualization
32	**Size Them Up!**	Students make shapes with Pattern Blocks, trace the outlines of their shapes, and arrange the outlines in what they perceive to be size order. They then look for different ways to check that they have ordered their shapes correctly.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Area, Comparing, Spatial Visualization
36	**Spiney and Other Creatures**	Students build Pattern Block creatures that grow in predictable ways. They then try to predict what their creatures will look like and how many blocks it will take to build them after seven stages of growth.	Problem Solving, Communication, Reasoning, Connections, Patterns/Functions	Addition, Growth Patterns, Interpreting Data, Multiplication, Organizing Data, Predicting
40	**The Last Block**	In this game for two or four players, Students take turns placing Pattern Blocks on a hexagonal game board.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic	Game Strategies, Properties of Geometric Figures, Spatial Visualization
44	**What's My Shape Worth?**	Students create Pattern Block designs and determine the “monetary value” of their designs based on a value assigned to one of the shapes.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic, Number	Area, Dealing With Money, Proportional Reasoning

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48	**What's Next?**	Students create, record, and predict repeating patterns using Pattern Blocks. They then relate their patterns to number patterns by using a hundred chart.	Problem Solving, Communication, Reasoning, Connections, Geometry, Patterns/ Functions	Looking for Patterns, Predicting
52	**Pattern Block Fractions**	In this activity, Students will work with a partner and use a combination of Pattern Blocks to represent one whole. Once they have defined the whole, they will then find fractions of the whole and add and subtract fractions with like and unlike denominators.	Problem Solving, Communication, Reasoning, Connections, Number	Fractions, Addition, Subtraction
56	**Angles of Polygons**	Students investigate the sums of the measure of the interior angles in a variety of polygons.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement, Patterns/Functions	Angles, Pattern Recognition, Polygons
60	**Comparing Areas**	Students investigate the relationship between the areas of two pairs of two different Pattern Blocks.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement, Number	Area, Fractions, Problem Solving Strategies, Spatial Visualization
64	**"Right"ing the Symmetry**	In this two-player game, Students work together to create two designs with Pattern Blocks having lines of symmetry that are parallel to each other (either vertical or horizontal).	Problem Solving, Communication, Reasoning, Connections, Geometry	Line Symmetry, Parallel Lines, Perpendicular Lines
68	**How Many Can Sit?**	Students use Pattern Blocks to investigate how perimeter changes as blocks are added to a shape.	Problem Solving, Communication, Reasoning, Connections, Geometry, Patterns/Functions	Interpreting and Organizing Data, Perimeter, Using Patterns
72	**Pattern Block Angles**	Students investigate the angles of Pattern Blocks by solving descriptive clues.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Angles, Estimation, Problem Solving Strategies, Spatial Visualization
76	**Reach Into the Bag**	Students identify Pattern Blocks that fit specific descriptions, using only their sense of touch.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Angles, Properties of Geometric Figures, Spatial Visualization
80	**What's My Value?**	Given that a certain Pattern Block has a value of one, Students find the value of large Pattern Block designs.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement, Number	Area, Fractions, Spatial Visualization