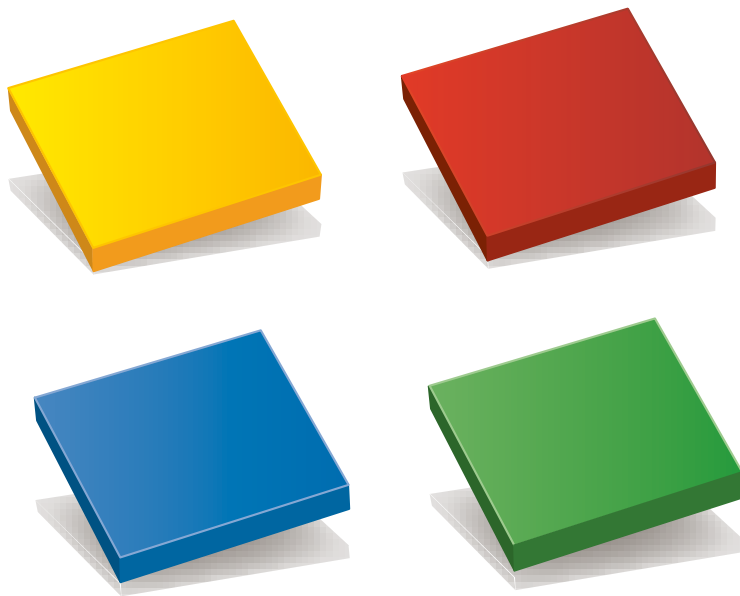


Math Tasks

with Color Tiles



Alignments

ACTIVITIES - 86582

Page	Activity Name	Description	Math Strand	Topics
12	Building Rectangles	In this activity, Students are introduced to the distributive property through visual models using Color Tiles as they explore ways to break apart rectangles to find area. Students will make a rectangle using Color Tiles, break it into two rectangles, and find the number of tiles in each rectangle.	Problem Solving, Communication, Reasoning, Connections, Measurement, Number	Area, Properties of Number, Multiplication
16	Ben's Garden Plot	Students use Color Tiles to design plots for a garden.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement, Number	Area, Comparing, Counting, Perimeter
20	Building a Wall	Students create a two-color pattern for a Color Tile wall. They extend the pattern and then determine how many tiles would be needed to repeat the pattern a given number of times.	Problem Solving, Communications, Reasoning, Connections, Geometry, Number, Patterns/Functions	Comparing, Counting, Multiplication, Patterns
24	Changing Areas	Students build a Color Tile shape and then find its perimeter. They build other shapes with the same perimeter and then find the area of each of these shapes.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Area, Comparing, Perimeter
28	Coasting Along	Students use Color Tiles to design square coasters. They record their design and then determine the fractional part of the whole that each color represents.	Problem Solving, Communications, Reasoning, Connections, Geometry, Number	Comparing, Fractions
32	Cover Up	In this game for two to four players, Students build Color Tile arrays to cover spaces on a hundred board according to a roll of a pair of number cubes.	Problem Solving, Communications, Reasoning, Connections, Geometry, Number, Patterns/Functions	Multiplication, Patterns, Properties of Numbers, Spatial Visualization
36	Fraction Bars	Students use Color Tiles to build a fraction bar that represents a whole. They write a set of clues to enable others to build the fraction bar.	Problem Solving, Communications, Reasoning, Connections, Number	Addition, Fractions
40	Growing Rectangles	Students use Color Tiles to build rectangles that "grow" in a predictable way. Then they predict the number of tiles needed to produce the rectangle that represents 10 more stages of growth.	Problem Solving, Communications, Reasoning, Connections, Geometry, Patterns/ Functions	Growth Patterns, Multiplication, Predicting, Rectangles
44	Logic Riddles	Students create riddles that provide clues about Color Tiles that they have hidden in a paper bag. Then they try to solve one another's riddles.	Problem Solving, Communication, Reasoning, Connections, Logic, Number	Counting, Deductive Reasoning, Fractions

CHALLENGE ACTIVITIES - 86582

Page	Activity Name	Description	Math Strand	Topics
48	Loose Links	Students play a game in which they start with a pile of 37 Color Tiles and then roll a die to determine the number of “chains” of equal length to make from the tiles.	Problem Solving, Communications, Reasoning, Connections, Number	Division, Multiplication, Patterns
52	Patterns of Symmetry	Students use Color Tiles to create square designs with various lines of symmetry.	Problem Solving, Communications, Reasoning, Connections, Geometry, Logic	Congruence, Spatial Visualization, Symmetry
56	Squares in a Square	Students use Color Tiles to learn about square numbers as they try to find all the squares contained in a 6-by-6 square figure.	Problem Solving, Communications, Reasoning, Connections, Geometry, Number, Patterns/Functions	Number Sequencing, Patterns, Spatial Visualization
60	A Logic Puzzle	Students use Color Tiles and blank spaces to form a square according to a given set of rules.	Problem Solving, Communications, Reasoning, Connections, Geometry, Logic, Patterns/Functions	Comparing, Spatial Visualization, Transformational Geometry
64	The Fraction Equalizer	In this two-player game, Students work together with Color Tiles to create fractions that are equivalent to each other, given different denominators to work with. They then record their results and verify that the other’s fraction is equal to their own. As they repeat game play, Students begin to notice a pattern that allows them to explain why a fraction is equivalent to another fraction.	Problem Solving, Communications, Reasoning, Connections, Geometry	Fractions, Fractional Equivalence, Making a Chart, Comparing
68	Lisa's Dog Pen	Students use Color Tiles to determine how to create a shape with a given perimeter and the greatest possible area.	Problem Solving, Communications, Reasoning, Connections, Geometry, Measurement	Area, Perimeter
72	Making Shapes	Students use Color Tiles to create a variety of shapes that have the same area. Then they find and compare the perimeters of the shapes they made.	Problem Solving, Communications, Reasoning, Connections, Geometry, Number	Area, Perimeter
76	Small Square Tables	Students use Color Tiles to model a problem involving the number of tables needed to seat different numbers of party guests.	Problem Solving, Communications, Reasoning, Connections, Geometry, Patterns/ Functions	Area, Looking for Patterns, Perimeter, Spatial Visualization
80	What Happens to the Area?	Students use Color Tiles to investigate how changing the length and width of a rectangle affects its area.	Problem Solving, Communications, Reasoning, Connections, Geometry, Logic, Measurement, Patterns/Functions	Area, Looking for Patterns, Spatial Reasoning