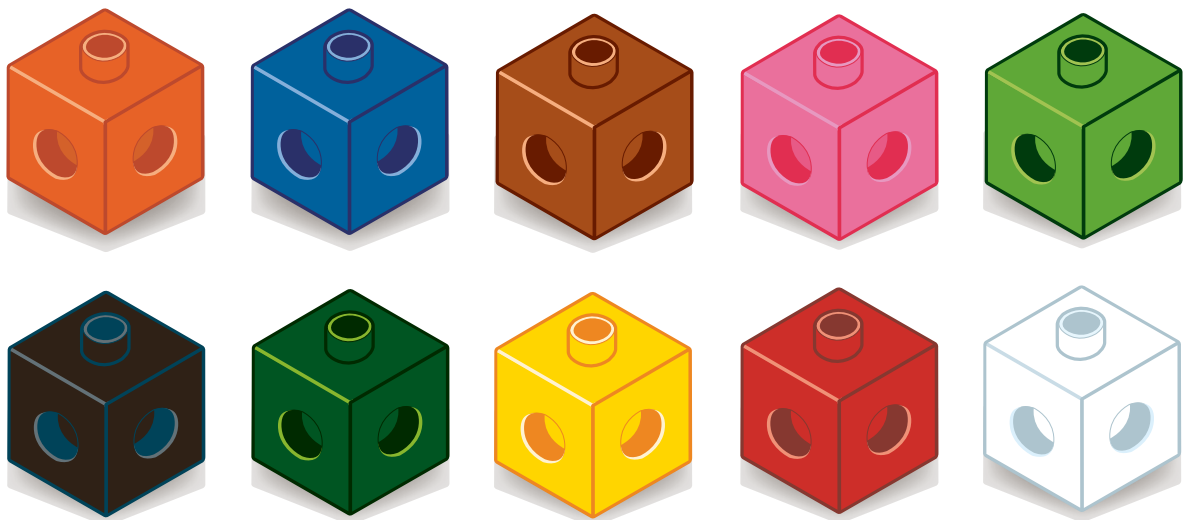


# Math Tasks

with Snap Cubes<sup>®</sup>



# Alignments

# ACTIVITIES - 86585

Page	Activity Name	Description	Math Strand	Topics
12	<b>A Tower of Squares</b>	Students use Snap Cubes to build larger and larger square prisms and stack them to form a tower. They predict the numbers of cubes needed to produce larger squares and towers.	Problem Solving, Communication, Reasoning, Connections, Geometry, Number, Patterns/Functions	Pattern Recognition, Square Numbers, Volume
16	<b>Yours, Mine &amp; Ours</b>	In this activity, Students will use an area model for multiplication to discover and apply the distributive property in order to multiply a factor greater than five by composing the second factor into two smaller addends.	Problem Solving, Communication, Reasoning, Connections, Patterns/Functions	Properties of Numbers, Equations, Multiplication
20	<b>Grab Bag Math</b>	Using Snap Cubes, Students explore the various one-layer rectangular boxes that can be made from different numbers of cubes.	Problem Solving, Communication, Reasoning, Connections, Geometry, Number	Area, Multiplication, Spatial Visualization
24	<b>Loose Caboose</b>	Students play a game in which they roll a die to determine how many trains of equal length it takes to build a pile of 27 Snap Cubes. They write a division sentence to describe what happens during each turn.	Problem Solving, Communication, Reasoning, Connections, Number	Division, Multiplication
28	<b>Making Frames</b>	Students use Snap Cubes to make frames that go around various rectangular prism shapes.	Problem Solving, Communication, Reasoning, Connections, Geometry, Number, Patterns/Functions	Area, Counting, Pattern Recognition, Perimeter
32	<b>Stacking Cubes</b>	In this activity, Students explore the concept of volume as a measure of the space a solid occupies, using Snap Cubes as the unit cube. They also investigate other ways to derive the formula for volume of rectangular prisms.	Problem Solving, Communication, Reasoning, Connections, Measurement	Volume, Multiplication, Scale Models, 3 Dimensional Shapes
36	<b>Showing One-Third</b>	Using Snap Cubes of two different colors, Students make rectangles with one-third of one color and two-thirds of the other color.	Problem Solving, Communication, Reasoning, Connections, Geometry, Number	Comparing, Counting, Equivalent Fractions
40	<b>Take the Cake</b>	Students use Snap Cubes to build models of one-layer sheet cakes. Then they determine the numbers of pieces with icing on one, two, or three sides.	Problem Solving, Communication, Reasoning, Connections, Geometry, Number, Patterns/Functions	Estimation, Pattern Recognition, Perimeter, Surface Area
44	<b>The Staircase Problem</b>	Students use Snap Cubes to build larger and larger staircases. They predict the numbers of cubes needed to produce a 10-step staircase that is three cubes wide.	Problem Solving, Communication, Reasoning, Connections, Number, Patterns/Functions	Interpreting Data, Looking for Patterns, Multiples, Organizing Data, Computation

# ACTIVITIES - 86585

Page	Activity Name	Description	Math Strand	Topics
48	<b>Trains and Boxcars</b>	Students play a game in which they roll a die to determine the number of Snap Cubes to put in a train. They roll the die a second time to determine the number of trains to make.	Problem Solving, Communication, Reasoning, Connections, Number	Addition, Multiplication
52	<b>Colors of the Rainbow</b>	In this two-player game, Students work together to create line plots to display the fractional amount of different-colored Snap Cubes they draw from a bag.	Problem Solving, Communication, Reasoning, Connections, Measurement	Collecting Data, Organizing Data, Interpreting Data
56	<b>Wrap It Up!</b>	Students use Snap Cubes to build different rectangular prisms and find the surface area of each.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Organizing Data, Pattern Recognition, Spatial Visualization, Surface Area, Volume
60	<b>Mystery Grids</b>	In this game for two players, one player tries to guess the secret Snap Cube arrangement created by the opposing player.	Problem Solving, Communication, Reasoning, Connections, Logic	Deductive Reasoning
64	<b>Painted Cubes</b>	Students imagine that structures made of Snap Cubes are dipped in paint. They predict how many faces of each Snap Cube would be painted.	Problem Solving, Communication, Reasoning, Connections, Geometry, Patterns/Functions	Algebra, Organizing Data, Surface Area, Volume
68	<b>Pentacubes I</b>	Students search for different ways to arrange five Snap Cubes so that each arrangement, or pentacube, lies flat on a desktop.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic	Congruence, Spatial Visualization, Transformational Geometry
72	<b>Pentacubes II</b>	Students search for different ways to arrange five Snap Cubes so that each arrangement, no matter how it is placed on a table, has at least one cube that does not touch the table.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic	Congruence, Spatial Visualization, Transformational Geometry
76	<b>Surface Area With 12 Cubes</b>	Students investigate the range of surface areas possible for different structures made with 12 Snap Cubes.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Surface Area, Volume
80	<b>Triangular Number Sequence</b>	Using Snap Cubes, Students build staircase models of triangular numbers. They record data about each staircase, look for patterns, and make conjectures.	Problem Solving, Communication, Reasoning, Connections, Number, Patterns/Functions	Growth Patterns, Pattern Recognition, Triangular Numbers