Math Tasks
with Snap Cubes®
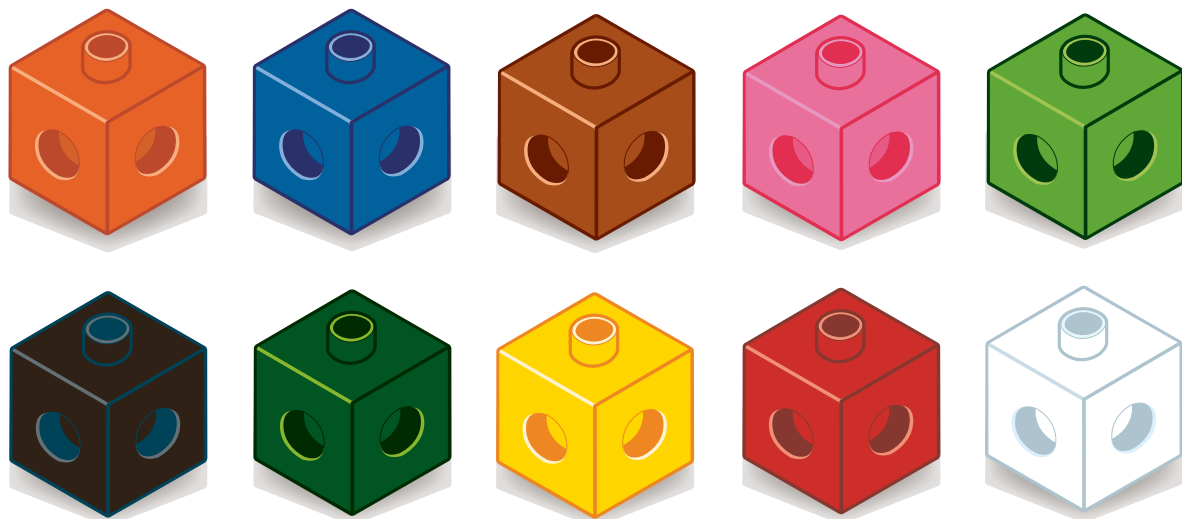
Allignments

ACTIVITIES - 86590

Page	Activity Name	Description	Math Strand	Topics
12	**Frac-Tangles**	Using Snap Cubes, students make rectangular prisms from clues given about the fractional mix of colors.	Problem Solving, Communication, Reasoning, Connections, Geometry, Number	Equivalence, Fractions, Proportion, Ratio
16	**Nothing But Net!**	In this two-player game, students work together with Snap Cubes to create three-dimensional geometric solids. Players create the nets, then use them to determine surface area.	Problem Solving, Communication, Reasoning, Connections, Geometry	Nets, Three-Dimensional Shapes, Shape Recognition, Spatial Visualization and Reasoning
20	**Snap to It!**	In this activity, students build models of perfect cubes using Snap Cubes. They record data, look for patterns, and make conjectures.	Problem Solving, Communication, Reasoning, Connections, Number	Properties of Number, Cubic Numbers, Exponents, Number Relationships
24	**Penta Nets**	Students build a structure with three Snap Cubes and draw a grid paper net that could be used to cover the structure.	Problem Solving, Communication, Reasoning, Connections, Geometry	Spatial Visualization, Surface Area
28	**Functions and Patterns**	In this activity, students will build models using Snap Cubes. They will record data about each structure, look for patterns, and make conjectures. They will also interpret the meaning of the initial value and rate of change for a linear function.	Problem Solving, Communication, Reasoning, Connections, Patterns/Functions	Numbers, Patterns, Counting

CHALLENGE ACTIVITIES - 86590

Page	Activity Name	Description	Math Strand	Topics
32	**Pentacube and Hexacube Twins**	Students use Snap Cubes to build five-cube and six-cube structures. Students identify which of their structures are reflections of each other and draw them on isometric dot paper	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement	Congruence, Spatial Visualization, Transformational Geometry
38	**Slice'n'Dice Cubes**	Students form cube and rectangular prism structures using Snap Cubes and imagine them being dipped in paint. Students investigate the patterns formed by the cubes that have paint on a given number of faces.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement, Number, Patterns/Functions, Probability/Statistics	Algebra, Organizing Data, Surface Area, Volume
44	**Saving Paper**	Students build four-cube structures made from Snap Cubes, and design nets that could be used to cover the structures. Students search for efficient ways to cut multiple copies of them from cardboard rectangles.	Problem Solving, Communication, Reasoning, Connections, Geometry, Patterns/Functions	Euler's Formula, Nets, Spatial Visualization, Surface Area

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50	**Bon Voyage**	Students use Color Tiles and Snap Cubes to build rectangles and rectangular solids. Students investigate how changing a dimension affects area or volume.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic, Measurement, Number, Patterns/Functions, Probability/Statistics	Area, Scale Drawings, Spatial Reasoning, Volume
56	**Cubes Sculptures**	Students search to find all possible surface areas that can be created by building structures made from 16 Snap Cubes.	Problem Solving, Communication, Reasoning, Connections, Geometry, Measurement, Number	Spatial Visualization, Surface Area, Volume
62	**Wrapping Paper**	Students use Snap Cubes to investigate surface areas and nets of rectangular prisms and irregular-shaped solids.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic, Measurement, Number	Nets, Spatial Visualization, Surface Area
68	**Carol's Kite Kits**	Students use Snap Cubes to build increasingly larger models of kite frames. They gather data and look for underlying number patterns.	Problem Solving, Communication, Reasoning, Connections, Geometry, Patterns/Functions, Probability/Statistics	Writing Algebraic Expressions, Area, Using Patterns, Solid Geometric Figures
74	**Snapshot**	In this activity, students take turns randomly fitting one Snap Cube in a box of 22 Snap Cubes. They use compiled data to predict the contents of the box. Then students make a duplicate box to test their predictions.	Problem Solving, Communication, Reasoning, Connections, Probability/Statistics	Sampling, Analyzing Data, Making Predictions
80	**Even-Steven**	Students create random samplings with Snap Cubes to test games for fairness. Students then create their own game and verify its fairness using sampling techniques.	Problem Solving, Communication, Reasoning, Connections, Number, Probability/Statistics	Sampling, Fairness, Making and Testing Hypotheses
86	**Cube Cover-Up**	Students use Snap Cubes to build a three-dimensional record of the results of multiple dice rolls. Students compare the theoretical probability to the experimental probability.	Problem Solving, Communication, Reasoning, Connections, Number, Probability/Statistics	Experimental Probability, Theoretical Probability, Making and Testing Hypotheses, Organizing and Interpreting Data
92	**Give and Take**	Students draw Snap Cubes from a bag and record the outcome of their picks. Based on the samples collected, students assess the game's fairness, and then make changes in order to produce a fair outcome.	Problem Solving, Communication, Reasoning, Connections, Probability/Statistics	Experimental Probability, Sampling, Fairness
98	**Collectible Cubes**	Students use Snap Cubes to conduct simulations to find the most likely number of trading card packages that they would need to buy in order to collect complete sets.	Problem Solving, Communication, Reasoning, Connections, Probability/Statistics	Simulation, Sampling, Analyzing Data
104	**Freeze Before Fifty**	In this game of chance, students use random numbers and operations to be the player who collects the closest number to 50 Snap Cubes without going over.	Problem Solving, Communication, Reasoning, Connections, Probability/Statistics	Chance, Number Sense, Game Strategies