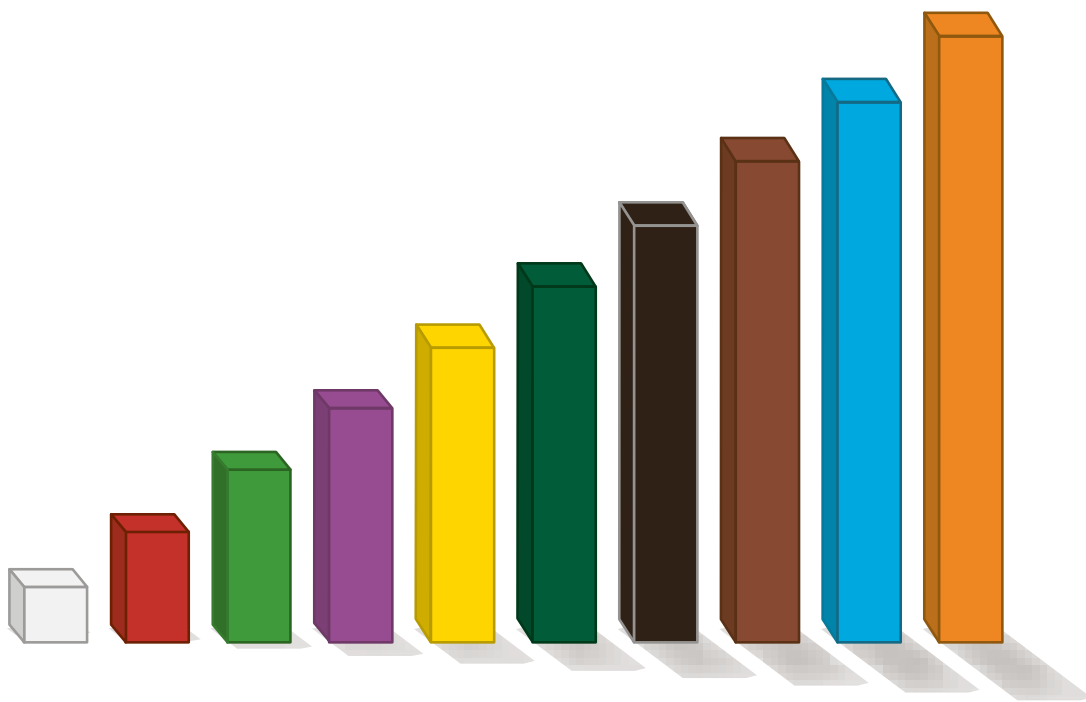


# Math Tasks with Cuisenaire® Rods



# Alignments

# ACTIVITIES - 86583

Page	Activity Name	Description	Math Strand	Topics
12	<b>Fraction Pairs</b>	Students find all pairs of Cuisenaire Rods that have a relationship that can be expressed in terms of a unit fraction.	Problem Solving, Communication, Reasoning, Connections, Number	Equivalence, Fractions, Spatial Visualization
16	<b>Just Too Big</b>	Students create different-sized “burgers” using two Cuisenaire Rods of the same color as the bun and one rod of a different color as the burger.	Problem Solving, Communication, Reasoning, Connections, Number, Patterns/ Functions	Counting, Patterns, Spatial Visualization
20	<b>Making Squares Grow</b>	Students use Cuisenaire Rods to build squares that “grow” in a predictable way. Then they use the patterns they see to predict the number of white rods they would need to add to a 25-by-25 centimeter square to produce a 26-by-26 centimeter square.	Problem Solving, Communication, Reasoning, Connections, Geometry, Patterns/ Functions	Growth Patterns, Properties of Squares
24	<b>Building Bridges</b>	In this activity, Students will imagine that there is a gap of a given size to bridge (represented by a single Cuisenaire Rod, or a combination of rods), and will use Cuisenaire Rods of a chosen color to build the bridge. They then compare the different bridges of that size that can be built, and explore equivalent fractions informally.	Problem Solving, Communication, Reasoning, Connections, Number	Fractions, Fraction Equivalence, Patterns
28	<b>Rod Stamping</b>	Students pretend to “stamp” Cuisenaire Rods with “glow-in-the-dark” ink. Then they look for patterns in the data they collect.	Problem Solving, Communication, Reasoning, Connections, Measurement, Patterns/Functions	Growth Patterns, Spatial Visualization, Surface Area
32	<b>Rodtangles</b>	In this game for two players, Students use spinners to determine the color and number of Cuisenaire Rods to place on a rectangular grid in an effort to be the first to completely cover the grid.	Problem Solving, Communication, Reasoning, Connections, Number, Probability/Statistics	Game Strategies, Multiplication, Spatial Reasoning
36	<b>Fraction Walls</b>	Students explore decomposition of fractions by building walls using a different combination of rods. Students then use fractions to describe the combinations of rods used to build each layer of the wall. They will then write expressions using fractions to describe the combination of rods used to create each layer.	Problem Solving, Communication, Reasoning, Connections, Number	Fractions, Fraction Equivalence, Addition
40	<b>Shorter Trains</b>	Students select a Cuisenaire Rod and then find the number of ways to make a two-car train that is shorter than the chosen rod.	Problem Solving, Communication, Reasoning, Connections, Number, Patterns/Functions	Inequalities, Number Sentences, Patterns
44	<b>Staircases</b>	Students build a staircase with Cuisenaire Rods and extend the patterns they see to find the number of white rods needed to build a staircase of any specific height.	Problem Solving, Communication, Reasoning, Connections, Number, Patterns/Functions	Addition, Counting, Estimation, Patterns

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48	<b>Name It!</b>	Students explore multiplication of fractions by renaming parts as they relate to a whole. They connect multiplication of whole numbers as equal groups and apply this to fractional products.	Problem Solving, Communication, Reasoning, Connections, Number	Fractions, Multiplication
52	<b>Symmetry Search</b>	Students figure out where to place a mirror on a given arrangement of Cuisenaire Rods to produce various symmetrical designs.	Problem Solving, Communication, Reasoning, Connections, Geometry	Spatial Visualization, Symmetry
56	<b>Tiling With Rods</b>	Students estimate, compare, and measure area by filling outlines of polygons with Cuisenaire Rods.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic, Measurement, Number	Area, Comparing, Equivalence, Spatial Visualization
60	<b>Blueprints</b>	Students build structures with Cuisenaire Rods and draw the different two-dimensional views of each—front, back, left, right, top, and bottom. Then they reverse the process by using one another's drawings to build matching structures.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic	Spatial Visualization, Transformational Geometry
64	<b>First to Finish</b>	In this game for two or more players, Students attempt to completely cover a game board with those Cuisenaire Rods that are fractional parts of the dark green rod.	Problem Solving, Communication, Reasoning, Connections, Number, Probability/Statistics	Fractions, Game Strategies, Theoretical Probability
68	<b>Fraction Fracas</b>	In this game for two to four players, Students take turns finding pairs of Cuisenaire Rods that represent a particular fraction in an effort to collect the most rods.	Problem Solving, Communication, Reasoning, Connections, Number	Fractional Equivalence, Fractions, Game Strategies
72	<b>Hidden Rods</b>	In this game for two players, Students use ordered pairs of numbers in an effort to guess the location of Cuisenaire Rods that have been placed on a centimeter grid.	Problem Solving, Communication, Reasoning, Connections, Geometry, Logic	Game Strategies, Spatial Visualization, Using Coordinate System
76	<b>Naming Rods</b>	Students assign a value of one whole unit to a Cuisenaire Rod of their choice. They then identify each of the other rods as a number based on its relationship to the unit rod.	Problem Solving, Communication, Reasoning, Connections, Number	Comparing, Fractions, Looking for Patterns
80	<b>Sculptures Big and Small</b>	Students construct and find the volume and surface area of sculptures made from five Cuisenaire Rods.	Problem Solving, Communication, Reasoning, Connections, Measurement, Number	Comparing, Interpreting Data, Surface Area, Volume