Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Four 4's** live	Deep Understanding	Number Sense	G4 - G8	4.OA.A.3, 5.OA.A.1, 5.OA.A.2, 6.EE.A.1, MP1, MP2	Addition, Algebraic Thinking, Division, Equations, Factorial, Grouping Symbols, Multiplication, Operations, Order of Operations, Parenthesis, Square Root, Subtraction	Four 4's is a crowd favorite! The goal is to use the given operations (and functions!) in between four 4's to make equations that equal the numbers 1 through 20. As the task progresses, students earn more operations to apply including adding, subtracting, multiplication, division, parenthesis, square root, and factorial.
 **Leap Frogs** live	Deep Understanding	Patterns	Pre K - G8	4.OA.C.5, 5.OA.B.3, MP7, MP8	Generalizing Patterns, Pattern Extension, Reasoning and Proof, Recognizing Patterns	Leap Frogs is a game that develops strategy, reasoning, pattern recognition and problem-solving. The goal is for the frog groups to switch sides! This task develops students' ability to think ahead, holding mathematical structures in their minds. It gives students an opportunity to play with the pattern, refine their strategies and work towards getting the smallest number of moves.
 **Leap Frogs Challenge** live	Challenge	Patterns	Pre K - G8	4.OA.C.5, 5.OA.B.3, MP7, MP8	Generalizing Patterns, Pattern Extension, Reasoning and Proof, Recognizing Patterns	Leap Frogs Challenge is an extension of the Leap Frogs task. While the goal in this task is the same-- move the frogs to their opposite sides-- there is an added challenge! This time around, the number of moves is limited to the minimum number of moves it takes to complete each level.
 **Towers of Hanoi** live	Deep Understanding	Patterns	Pre K - G8	4.OA.C.5, 5.OA.B.3, MP1, MP2, MP7, MP8	Generalizing Patterns, Pattern Extension, Reasoning and Proof, Recognizing Patterns	This is a mathematical puzzle that was introduced to the world in the 1800's and has fascinated people for centuries. Towers of Hanoi challenges your students to develop logic and problem solving in a safe and playful way. This task is a great way to support students to recognize and generalize patterns-- an important component of algebraic thinking.
 **Tower of Hanoi Challenge** live	Challenge	Patterns	Pre K - G8	4.OA.C.5, 5.OA.B.3, MP1, MP2, MP7, MP8	Generalizing Patterns, Pattern Extension, Reasoning and Proof, Recognizing Patterns	Towers of Hanoi Challenge is an extension of the Towers of Hanoi task. The goal is to rebuild the tower on the rightmost platform, only moving one disk at a time and only placing smaller disks on top of larger disks. However, the added challenge this time around is that the number of moves is limited to the minimum number of moves it takes to complete each level.
 **Turn the Frown** live	Deep Understanding	Patterns	Pre K - G8	4.OA.C.5, 5.OA.B.3, MP1, MP2, MP7, MP8	Generalizing Patterns, Pattern Extension, Reasoning and Proof, Recognizing Patterns	Turn the Frown is a puzzle that develops mathematical curiosity and problem solving. The goal is to turn all the faces to be smiling. But there's one catch – the coins can only be flipped in groups of three. This task is a great way to introduce students to the concept of problem solving as it challenges them to adjust their strategy as they progress through it.
 **Turn the Frown Challenge** live	Challenge	Patterns	Pre K - G8	4.OA.C.5, 5.OA.B.3, MP1, MP2, MP7, MP8	Generalizing Patterns, Pattern Extension, Reasoning and Proof, Recognizing Patterns	Turn the Frown Challenge builds on Turn the Frown, now the number of turns is limited to the minimum number of turns it takes to turn the frowns into smiles! This is a wonderful opportunity to discuss with students the mathematical problem solving strategy of working with a simpler case and using what you learn to apply to the more challenging case.
 **Arithmagons** live	Deep Understanding	Number Sense Patterns	G1 - G3	2.OA.A.1, 3.OA.D.8, 4.OA.A.3, 5.OA.A.2, 6.EE.B.5, MP1, MP2, MP7	Addition, Algebraic Reasoning, Subtraction	Arithmagons give students opportunities to practice number relationships and operations as they work to achieve balance in the puzzle. While on the surface this task is about adding and subtracting, students are also engaging in algebraic thinking and reasoning as they are working on balancing an equation with given constraints.
 **Keep It Orderly** live	Deep Understanding	Number Sense Patterns	G3 - G8	5.OA.A.1, 5.OA.A.2, 6.EE.A.1, 6.NS.C.5, MP1, MP2, MP7, MP8	Addition, Equations, Multiplication, Negative Numbers, Order of Operations, Place Value, Subtraction	In Keep It Orderly, students are challenged to use the numbers 1-5 to reach the target numbers using the given operation(s) for the level they are playing. The catch is that the numbers need to stay in order! Students engage with a myriad of math topics including: addition, subtraction, multiplication, negative numbers, and the order of operations.
 **Busy Bees** live	Deep Understanding	Number Sense Patterns	G1 - G5	2.NBT.B.5, 2.NBT.B.9, 3.OA.D.9, 4.OA.C.5, MP1, MP2, MP7	Addition, Algebraic Reasoning, Generalizing Patterns, Number Composition, Recognizing Patterns, Subtraction	In this task students build honeycombs of numbers following a particular structure. To build the honeycombs, students must decide where to place the given values within the structure to follow the numerical pattern. This task gives students opportunities to build number sense, while also working on addition and subtraction.
 **Shape Puzzles** live	Deep Understanding	Number Sense Patterns	G1 - G8	1.OA.A.1, 1.OA.A.2, 1.OA.B.3, 1.OA.C.6, 1.OA.D.8, 2.OA.A.1, 2.OA.B.2, 3.OA.D.9, MP1, MP2, MP7	Addition, Algebraic Reasoning, Algebraic Thinking, Operations	On the surface, Shape Puzzles is about addition, but once your students dive in, you will see it is about so much more. The puzzle starts with a shape that has numbers placed within it that follow a particular pattern. The goal is for students to place the remaining numbers into the holes to complete the pattern. As the levels progress, so does the challenge!
 **Shape Puzzles Challenge** live	Challenge	Number Sense Patterns	G1 - G8	1.OA.A.1, 1.OA.A.2, 1.OA.B.3, 1.OA.C.6, 1.OA.D.8, 2.OA.A.1, 2.OA.B.2, 3.OA.D.9, MP1, MP2, MP7	Addition, Algebraic Reasoning, Algebraic Thinking, Operations	Shape Puzzles Challenge presents a significantly more challenging version of the original puzzle. Students are faced with new shapes with no givens, meaning there will be no values and no sums in the shapes to start. Your students will be working on addition, but also engaging in the algebraic thinking of balancing equations within given constraints.

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Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Pascal's Triangle** live	Deep Understanding	Number Sense Patterns	G1 - G8	3.OA.D.9, 4.OA.C.5, 4.NBT.B.4, 5.OA.B.3, MP1, MP2, MP7, MP8	Addition, Binomial Coefficients, Exponents, Fibonacci Sequence, Geometric Sequence, Multiples, Multiplication, Number Patterns, Reasoning, Recognizing Patterns, Sierpinski Triangle, Subtraction, Symmetry	Pascal's triangle is a famous number triangle full of patterns. In this task, students are first asked to make sense of the pattern to produce missing numbers within the pattern. Next, students are asked to explore and investigate the many patterns present in the triangle and show them by color coding the triangle to illuminate the patterns they have found.
 **Happy Numbers** live	Deep Understanding	Number Sense Patterns	G6 - G8	6.EE.A.1, 6.EE.A.2, MP1, MP2, MP7, MP8	Exponents, Number Theory, Pattern, Recognition, Reasoning and Proof, Sequences	The concept of happy numbers comes from an area of mathematics called „Number Theory“ which is focused on the study of integers. To start this task, students learn what makes a number “happy“ by working with the first example: 13. Next, students will explore many more numbers to see which ones follow the happy number pattern.
 **Mighty Mosaic** live	Deep Understanding	Patterns Shape & Space	Pre K - G8	K.G.B.5, K.G.B.6, 1.G.A.2, 2.G.A.1, MP2, MP7, MP8	Applying Patterns, Compose Shapes, Generalizing Patterns, Geometry, Pattern Extension, Reasoning and Proof, Recognizing Patterns, Shape Attributes	Mighty Mosaic is a pattern game that challenges your students to think ahead. The rule is that a tile cannot be placed next to another tile of the same color, and the goal is to place the tiles so that the colors create the target pattern. The mathematics of this task involves the famous mathematics theory called the Four Color Theorem.
 **NIM** live	Deep Understanding	Number Sense Patterns	Pre K - G8	K.OA.A.1, K.OA.A.2, K.OA.A.3, K.OA.A.5, 1.OA.A.1, 2.OA.A.1, MP2, MP7, MP8	Addition, Combinatorial Game Theory, Combinatorics, Generalizing Patterns, Number Composition, Number Flexibility, Number Sense, Recognizing Patterns, Subtraction	NIM is a famous game involving thinking strategically about number composition. Your student takes turns against the computer deciding how many balls to snatch. The goal is to be the player to snatch the last ball! The mathematics involved in the game comes from an area of mathematics called combinatorial game theory.
 **Tessellation Tiles** live	Deep Understanding	Shape & Space	Pre K - G8	K.G.B.5, K.G.B.6, 1.G.A.2, 2.G.A.1, MP2, MP5, MP7	Compose Shapes, Geometry, Reflection, Rotation, Shape Attributes, Spatial Reasoning, Translation	In this task, students are given a series of shapes to compose together and fit inside of a defined form. Once all the puzzle pieces have been fit into the whole, the child clicks "tessellate" and the image tessellates to fill their screen. This task has an extra fun additional feature where the child can download their tessellation and print it out for more fun and exploration.
 **Have a Half** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	2.G.A.3, 3.NF.A.1, 3.NF.A.3, 3.G.A.2, 4.NF.A.1, 4.NF.A.2, 6.RP.A.1	Area, Area Relationships, Building Fractions, Equivalent Fractions, Fractions, Geometry, Ratios, Symmetry, Unit Fractions	Have a Half focuses students on laying tiles into a given shape and then shading the tiles so that exactly ½ of the shape is colored pink. While the goal of shading the shape to be ½ pink remains the same throughout this task, students will need to think strategically and creatively as the levels progress and the number of tiles goes beyond two!
 **Thirsty for Thirds** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	2.G.A.3, 3.NF.A.1, 3.NF.A.3, 3.G.A.2, 4.NF.A.1, 4.NF.A.2, 6.RP.A.1	Area, Area Relationships, Building Fractions, Equivalent Fractions, Fractions, Geometry, Ratios, Symmetry, Unit Fractions	Thirsty for Thirds builds upon what students explored in Have a Half and Finding Fourths with the new challenge of thinking flexibly about thirds. As your students progress through the levels of this task, the tiles' size and the shape's partitioning will change, providing a challenging shift in focus to the concept of equivalent fractions.
 **Finding Fourths** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	2.G.A.3, 3.NF.A.1, 3.NF.A.3, 3.G.A.2, 4.NF.A.1, 4.NF.A.2, 6.RP.A.1	Area, Area Relationships, Building Fractions, Equivalent Fractions, Fractions, Geometry, Ratios, Symmetry, Unit Fractions	Finding Fourths builds upon what your students explored in Have a Half with the new challenge of thinking flexibly about ¼ . As your students progress through the levels of this task, the tiles' size and the shape's partitioning will change, providing a challenging shift in focus to the concept of equivalent fractions.
 **Fitting Fractions** live	Deep Understanding	Number Sense Shape & Space	G3 - G8	3.NF.A.1, 3.NF.A.3, 3.G.A.2, 4.NF.A.1, 4.NF.A.2, 6.RP.A.1	Area, Area Relationships, Building Fractions, Equivalent Fractions, Fractions, Geometry, Ratios, Symmetry, Unit Fractions	Fitting Fractions is all about just that-- fitting fraction tiles of various sizes together. The goal in this task is to shade the shape to match the colors of the predefined fraction amounts of the whole. Students will be challenged to relate fractions of different denominators together to fit in the same whole.
 **Slice 'n' Dice** live	Deep Understanding	Number Sense Shape & Space	G3 - G8	3.NF.A.1, 3.NF.A.3, 4.NF.A.2, 4.NF.B.3, 5.NF.A.1, 5.NF.A.2, MP2, MP5, MP7	Area, Area Relationships, Building Fractions, Common Denominators, Denominators, Equivalent Fractions, Fractions, Geometry, Ratios, Symmetry, Unit Fractions	Slice ‘n’ Dice is about challenging students to make sense of fractions-- the numerator and the denominator, and how these values relate to a visual representation of a fraction. While one sized denominator is sufficient in highlighting one section of the shape, an even larger denominator may be needed to decide the next fraction.
 **Fraction Balls** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	1.G.A.3, 2.G.A.3, 3.NF.A.1, 3.NF.A.3, MP1, MP2, MP3, MP7	Area Relationships, Equivalent Fractions, Fractions, Unit Fractions	This task is focused on connecting visual and symbolic representations of fractions. Students are given a set of various sized fraction pieces and challenged to place them in a way that creates whole balls. In this task your students are developing flexibility with key unit fractions learning how they relate to one another despite having different denominators.
 **Devising Decimals** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	4.NF.C.6, 5.NBT.A.1, 5.NBT.B.7, MP2, MP4, MP5, MP7	Area Models, Base 10, Converting Decimals, Converting Fractions, Decimals, Hundredths, Place Value, Tenths	Devising Decimals introduces students to visualizing and building decimal numbers using cuisenaire rods within an area model. This task is focused on number flexibility and conceptual understanding of place value as well as the relationship between fractions and decimals. Students will think in tenths and hundredths, both visually and numerically, through play. Autogenerated levels.

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Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Decimals in a Well** live	Deep Understanding	Number Sense Patterns	G2 - G6	2.MD.C.8, 4.NF.C.6, 5.NBT.B.7, MP1, MP2, MP4, MP5, MP7	Currency, Decimals, Money, Number Line, Place Value, Replicating Units, Unit Patterns	Decimals in a Well presents your students with a new and fun challenge of learning about decimals in the context of money! Students are challenged to drop specific amounts of money into the well with a catch - only some of the coins are available. Students will work on place value and arithmetic with decimal numbers as they move through the levels of this task.
 **Decimals in a Well Challenge** live	Challenge	Number Sense Patterns	G2 - G6	2.MD.C.8, 4.NF.C.6, 5.NBT.B.7, MP1, MP2, MP4, MP5, MP7	Algebraic Reasoning, Algebraic Thinking, Currency, Decimals, Money, Number Line, Place Value, Replicating Units, Unit Patterns	Decimals in a Well Challenge extends the original task with the added challenge of generating the goal value using a pre-defined number of coins. This challenge brings in an algebraic reasoning component to the task as students reason through a solution while keeping these restrictions in mind.
 **More or Less** live	Deep Understanding	Number Sense	K - G1	K.CC.B.4, K.CC.C.6, K.MD.A.2, 1.MD.C.4, MP1, MP2, MP7	Cardinality, Comparing Magnitude, Counting, Equal To, Greater Than, Less Than, Measurement	In the More or Less task your students develop number sense by comparing two groups of objects and deciding which is bigger. In mathematics, this concept is called magnitude. Developing an intuitive sense of magnitude is an important step in mathematics learning as well as brain development in general.
 **1 to 100** live	Deep Understanding	Number Sense Shape & Space	G1 - G3	1.NBT.B.2, 1.NBT.C.4, 2.NBT.A.1, 2.NBT.A.2, MP2, MP4, MP5, MP7	Area, Counting, Number Composition, Place Value	1 to 100 challenges students to exercise their number sense and flexibility using Cuisenaire rods to build various values from one to one hundred. Students are tasked with building a given number using only a limited set of rods. As the levels progress, your students need to be strategic about how the rods are used in combination with one another to build the goal value.
 **Fractions on a Line** live	Deep Understanding	Number Sense	G3 - G8	3.NF.A.2, 3.NF.A.3, 4.NF.A.2, 3.NF.A.3, 5.NF.A.1, 5.NF.A.2, MP1, MP2, MP4, MP7, MP8	Addition, Equivalent Fractions, Fractions, Number Line, Unit Fractions	Fractions on a Line challenges students to think conceptually and strategically about how to build various fractions using parts of differing sizes. As students select pieces, they are shown on the number line to connect both the visual and numerical representations of the fraction sum. Eventually, your students will need to combine fractions of differing denominator size.
 **Cuisenaire Towers** live	Deep Understanding	Number Sense Patterns	K - G3	K.OA.A.1, K.OA.A.2, K.OA.A.3, K.OA.A.4, 1.OA.A.1, 1.OA.A.2, 1.OA.C.6, 1.MD.A.2, 2.OA.B.2, MP1, MP2, MP4, MP5, MP7, MP8	Addition, Combinations, Combinatorics, Number Composition	Cuisenaire Towers is a visual task to explore number composition. Students are tasked with finding all the ways to build the numbers 2 to 10 using cuisenaire rods. Students develop an understanding of how the same number can be composed in many different ways, thus expanding and strengthening their number sense and number flexibility.
 **Cuisenaire Towers Challenge** live	Challenge	Number Sense Patterns	K - G8	K.OA.A.1, K.OA.A.2, K.OA.A.3, K.OA.A.4, 1.OA.A.1, 1.OA.A.2, 1.OA.C.6, 1.MD.A.2, 2.OA.B.2, MP1, MP2, MP4, MP5, MP7, MP8	Addition, Combinations, Combinatorics, Number Composition	Cuisenaire Towers Challenge builds upon Cuisenaire Towers and makes the need for strategic thinking even bigger! Now your students are tasked with building all the possible towers of the given size, but with a catch-- no repeats! Cuisenaire Towers Challenge is a fun and exciting way to learn to use color and size for visual organization of numbers.
 **Hall of Mirrors** live	Deep Understanding	Number Sense Patterns	G2 - G8	3.OA.A.1, 3.OA.B.5, 3.OA.C.7, 4.OA.B.4, MP1, MP2, MP4, MP5, MP7	Factorization, Factors, Multiplication, Multiplication Table, Visual Numbers	Hall of Mirrors is a fundamental task in the development of number sense, number flexibility, and especially multiplication and division. Students are tasked with creating visual representations of the multiplication chart utilizing number sliders to generate factors within the product they wish to create.
 **Schroedinger's Cat** live	Deep Understanding	Number Sense Patterns	G2 - G5	2.OA.C.4, 3.OA.A.1, 3.OA.A.3, 4.OA.A.1, 6.EE.B.6, MP1, MP2, MP4, MP5, MP7, MP8	Multiplication, Repeated Addition	In Schroedinger's Cat, your students are tasked with packing the sample box with the number of balls it takes to create the goal product. This gives your students a conceptual and visual representation of the idea of multiplication-- taking one value and repeating it a number of times.
 **Sort it Out Multiplication** live	Practice	Number Sense Patterns	G3 - G6	3.OA.A.1, 3.OA.A.3, 3.OA.C.7, 4.OA.A.1, MP2, MP4	Multiplication, Procedural Fluency, Times Tables, Repeated Addition, Area Model, Factors, Factor, Model, Visual Numbers, Dice, Products, Expressions	Sort it Out Multiplication is a Practice Task built to bridge conceptual understanding and procedural fluency of the multiplication table up through 12 x 12. Students are given a stack of cards to sort to the matching product. The deck features five representations: expressions, repeated addition, dice, area models, and factor models.
 **Sort it Out Fractions** live	Practice	Number Sense Shape & Space	G3 - G8	3.NF.A.2, 3.NF.A.3, 4.NF.A.1, 4.NF.A.2, MP1, MP2, MP7	Area Models, Decimals, Equivalent Fractions, Fractions, Improper Fractions, Mixed Numbers, Number Line Model, Reducing Fractions	Sort It Out Fractions supports your students to develop flexibility with fractions through card sorting. The card deck features five types of representations: shapes, clocks, number line, items, and symbols. The symbolic representations include: simplified fractions, like fractions, fractions as division, mixed numbers, fractions as decimals and “improper fractions.”

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Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Twist 'n' Shout** live	Practice	Number Sense Patterns Shpae & Space	K - G8	4.OA.C.5, 5.OA.B.3, 6.G.A.4, MP1, MP2, MP5, MP6, MP7, MP8	Number Composition, Addition, Counting, Rotations, Spatial Reasoning3-Dimensional Thinking, Dice, Combinations	Twist 'n' Shout is an extra challenging task for the mind! Students are presented with a stack of dice, and a minimum number of turns they can use to rotate the dice to display a sum of ten dots. On the left of the screen, the student has an example dice that they may use as a resource to plan out exactly how they will turn the dice.
 **It's a 10** live	Deep Understanding	Number Sense Patterns Shape & Space	K - G8	K.OA.A.3, K.OA.A.4, 1.OA.C.6, MP1, MP2, MP5, MP7	Number Composition, Addition, Counting, Rotations, Spatial Reasoning, 3-Dimensional Thinking, Dice, Combinations	In It's a 10 your students will be challenged to use the given dice to make a sum of 10, starting with two dice and working up to four. This task supports your students to build number sense and flexibility with addition. At the same time, your students will be working on spatial reasoning and 3-dimensional thinking.
 **Dicey Dice** live	Practice	Number Sense Shape & Space	Pre-K - G2	K.CC.B.5, K.OA.A.1, K.OA.A.2, K.OA.A.3 1.OA.C.6, 2.OA.B.2, MP1, MP2, MP5, MP7	Counting Cardinality, Addition, Counting Up, Counting On, Rotations, Spatial Reasoning, 3-Dimensional Thinking, Dice	Dicey Dice is all about counting-- in this case, counting the dots on dice. Each level starts with three representations of the goal number: a numeral, an array of dots, and a verbal reading of the number. Your students will rotate the dice until the count of dots matches the goal value. This task focuses on counting up to 20.
 **Sum Fishing** live	Practice	Number Sense Patterns	G1 - G4	2.NBT.B.5, 2.NBT.B.9, 3.OA.D.9, 4.OA.C.5, MP1, MP2, MP7	Addition, Algebraic Reasoning, Generalizing Patterns, Number Composition, Recognizing Patterns, Subtraction	Sum Fishing is a Practice Task and an extension of Busy Bees, built to bridge conceptual understanding and procedural fluency of addition from 1 to 49. In this task, students build combs of numbers following a particular structure. Students get opportunities to build number sense while also working on addition and subtraction.
 **Count of Counts** live	Practice	Number Sense	Pre-K - G1	K.CC.A.1, K.CC.B.4, K.CC.B.5	Counting, Cardinality	In this task, your students work on counting! Count of Counts challenges your students to pack up the goal number of items into the box. This task supports students to connect number names (ex. "three") and numerals (ex. "3") with the number of objects (ex. 3 balls).
 **Domino Squares** live	Practice	Number Sense Patterns	G2 - G5	4.OA.A.3, 5.OA.B.3, 6.EE.C.9, MP1, MP2, MP7, MP8	Addition, Algebraic Thinking, Arithmetic, Generalizing Patterns, Number Composition, Recognizing Patterns	In Domino Squares your students are given several dominos, a goal sum, and a square pattern to lay the tiles within. Your students must select dominos to lay into the square pattern such that the sum of all the dots on the selected dominos matches the goal sum!
 **Domino Street** live	Practice	Number Sense	K - G4	K.CC.B.4, K.CC.B.5, K.OA.A.1, 1.OA.A.1, 1.OA.A.2, 1.OA.C.5, 1.OA.C.6, MP1, MP2, MP7	Addition, Cardinality, Counting	Domino Street covers number sense, addition, and strategic thinking. Each round, your students are presented with a pile of dominos and they are tasked with laying the tiles into the street with the end goal that the sum of all the dots on the dominos matches the total amount marked at the finish line. The catch is that your students must follow the typical domino pattern.
 **Gear Up** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	3.OA.A.2, 3.OA.B.6, MP2, MP4, MP7, MP8	Division, Number Path, Repeated Addition, Repeated Subtraction	Gear up is about making sense of division! Your students are presented with a division problem and must decide the solution using the rotation of the gear as a guide. If the solution is going to work, the gear will perfectly rotate and end on the dividend's location on the number path. If not, that's no problem, there's always a chance to try again!
 **Packing Equations** live	Deep Understanding	Number Sense Patterns	G4 - G7	4.OA.A.3, 5.OA.A.2, 6.EE.B.6, 6.EE.B.7, MP1, MP2, MP4, MP5	Addition, Algebraic Reasoning, Division, Multiplication, Multi-step Equations, Operations, Subtraction, Variables	In Packing Equations, your students will engage in a challenging mathematical puzzle! The goal is to decide how many balls must be packed into each box for the total number of balls in the image--including those packed away in boxes equal the goal amount.
 **Division Factory** live	Deep Understanding	Number Sense Patterns	G3 - G6	3.OA.A.2, 3.OA.C.7, 4.OA.B.4, 4.NBT.B.6, MP2, MP7, MP8	Division, Factors, Generalizing Patterns, Prime Numbers, Recognizing Patterns, Visual Numbers	Division Factory is a fun way for your students to strengthen their number sense, flexibility, and even fluency with division. Each card features the visual representation of a number. Your students must decide if the number is divisible by the given divisor and then sort the card into the thumbs up pile for “yes” or the thumbs down pile for “no”.
 **Multiplication Mining** live	Practice	Number Sense Shape & Space	G3 - G5	3.OA.A.1, 3.MD.C.5, 3.MD.C.7, 4.NBT.B.5, MP2, MP4, MP7	Area, Area Models, Multiplication	Multiplication Mining is a practice task all about supporting your students' development of number sense and procedural fluency with multiplication up through 10 x 12. In this task, your students are presented with a grid of blocks and must mine the treasures below making connections between multiplication questions and their corresponding area models.
 **Framing Tens** live	Practice	Number Sense Shape & Space	Pre-K - G1	K.OA.A.3, K.OA.A.4, K.CC.B.5, MP1, MP2, MP4, MP8	Cardinality, Counting, Addition, Subtraction	In Framing Tens, your students work on a multidimensional exercise utilizing a mathematical representation called a Ten Frame – a useful tool for supporting your students' development of number sense and flexibility with counting, addition, subtraction, and place value. Framing Tens focuses on addition and subtraction within 20.

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Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Sum Maze** live	Practice	Number Sense	G1 - G2	1.NBT.C.4, 2.OA.A.1, MP1, MP2, MP7	Addition, Algebraic Thinking, Number Composition, Subtraction	Sum Maze is a practice task that's all about supporting the development of number sense and flexibility within addition. The maze starts with the bulb at the bottom end of the maze. Then students select bulbs to progress through the layers of the maze all while keeping in mind which values will add together to make the goal sum displayed in the air balloon at the top!
 **Skippy Bingo** live	Practice	Number Sense Shape & Space	G2 - G4	2.OA.C.4, 2.NBT.A.2, 3.OA.A.1, 3.OA.A.2, 3.OA.A.3, 3.OA.C.7, 4.OA.A.1, MP2, MP7	Array Model, Division, Multiplication, Repeated Addition, Skip Counting	Skippy Bingo is a multidimensional task-- to an extreme! This task connects repeated addition, skip counting, multiplication and division. Your students must decide all of the numbers the jumping animal will land upon across the number path and submit the solution. Each section will be stacked into an array model highlighting the multiplication problem.
 **Subtraction Blast** live	Practice	Number Sense Shape & Space	Pre-K - G2	K.CC.B.4, K.OA.A.1, K.OA.A.3, K.NBT.A.1, 1.OA.C.6, MP1, MP7, MP8	Counting, Grouping, Subtraction	Subtraction Blast is an exciting task focused on number flexibility and especially the concept of subtraction! Each round starts with a goal number shown at the top of the screen, this number will also read aloud to your students. The goal is for your students to blast away the extra balls on the screen to end with the goal number of balls.
 **Divy Up With Fractions** live	Deep Understanding	Number Sense Shape & Space	G5 - G8	5.NF.B.7, 6.NS.A.1, MP1, MP2, MP7	Division, Division of Fractions, Fractions	In Divvy Up with Fractions students are challenged with a series of division questions, and the divisors are fractions. Your students will be shown the question in symbols and be challenged to use the visual representations to make sense of the solution.
 **Dropping Dividends** live	Deep Understanding	Number Sense Shape & Space	G3 - G5	3.OA.A.2, 3.OA.B.6, 4.NBT.B.6, MP1, MP2, MP7	Array Model, Division, Multiplication	Dropping Dividends is about making sense of division using an array model. Each level, your students will be presented with a division question, the goal is to decide how many rows of balls to drop in order for the total array to represent the dividend. This task includes one and two digit divisors with two and three digit dividends.
 **Rock Around the Clock** live	Practice	Number Sense	G1 - G3	1.MD.B.3, 2.MD.C.7, MP1, MP2, MP4, MP5, MP6, MP7, MP8	Analog Clock, Digital Clock, Telling Time	In this practice task, your students are presented with a time of day both verbally and via a digital display. The goal is to turn the hands of the analog clock to match using context clues to select a.m. or p.m. Early rounds of this task focus hours and then half hours. Eventually quarter hours and intervals of 5 and 10 unlock and finally all hours and minutes!
 **Rolly Per-Olly** live	Deep Understanding	Number Sense Shape & Space	G3 - G4	3.MD.D.8, MP1, MP2, MP5, MP7	Composite Shapes, Geometry, Linear Measurement, Perimeter, Polygons, Rotation, Spatial Reasoning	Rolly Per-olly provides an engaging and dynamic opportunity for your students to explore the concept of perimeter. Each level your students are presented with a polygon and tasked with deciphering its perimeter. Students use the unrolling tool to drag the shape across the grid and to unroll the perimeter into a linear measurement and submit a solution.
 **Inside Outside** live	Practice	Number Sense Shape & Space	G3 - G4	3.MD.C.5, 3.MD.C.6, 3.MD.D.8, 6.G.A.1, MP1, MP2, MP4, MP5, MP7	Area, Linear Measurement, Perimeter, Spatial Reasoning, Square Measurement	Inside Outside is all about challenging your students to make sense of area and perimeter. Students can often confuse these two measures and Inside Outside provides a wonderful opportunity to see the difference! Each round your students are presented with a goal area and perimeter and they must build a polygon to match!
 **Volume Venture** live	Practice	Number Sense Shape & Space	G3 - G5	4.MD.A.1, 5.MD.A.1, 5.MD.C.3, MP1, MP2, MP6, MP7	Comparing Magnitude, Inequality, Measurement, Place Value, Volume, Rational Numbers	In Volume Venture, your students are presented with a set of tubes filled with various amounts of liquid. The goal is to re-order the tubes to make a true inequality. While this task may seem simple at first, your students are working to connect many mathematical ideas including place value, unit conversions, volume measures, magnitude, and rational numbers.
 **Shape Showers** live	Practice	Shape & Space	Pre-K - G1	K.G.A.2, K.G.B.4, 1.G.A.1, 2.G.A.1, MP2, MP6, MP7	Shape Attributes, Shapes, Vocabulary	Shape Showers is a practice task that challenges your students in developing the important skills of shape recognition, vocabulary, and attribute matching. Shapes shower down while students collect them, paying careful attention to both the shape and color. This practice task covers basic shapes including: circles, triangles, rectangles, pentagons, hexagons, and stars.
 **Bubble Place** live	Practice	Number Sense	G1 - G3	1.OA.D.7, 1.OA.D.8, 1.NBT.B.2, 1.NBT.C.4, 2.NBT.B.5, 3.NBT.A.2, 4.OA.A.3, MP1, MP2, MP7	Addition, Arithmetic, Equal To, Number Sentence, Place Value, Subtraction	Bubble Place is a practice task for your students to work on addition and subtraction within 100 with a fun-- and challenging-- number sense twist. Your students need to reorder the bubble numbers and the operation to create a true number sentence. During this task, your students are applying their understanding of place value and strengthening their number sense.
 **Fire and Ice** live	Practice	Number Sense Patterns	G1 - G2	K.OA.A.1, 1.OA.A.1, 1.OA.C.6, 1.OA.D.8, 2.OA.B.2, MP1, MP2, MP4, MP7	Subtraction, Algebraic Thinking, Arithmetic, Number Sense, Reasoning, Procedural Fluency, Comparison	Fire and Ice focuses on the comparison of two values for subtraction with an unknown subtrahend (i.e. the number being subtracted). The task features several fire flames and your student must generate the correct number of ice cubes to extinguish the flames and leave the solution amount remaining.

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Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Building Value** live	Practice	Number Sense Patterns Shape & Space	G2 - G4	2.NBT.A.1, 3.NBT.A.2, 4.NBT.A.1, 4.NBT.A.2, 5.NBT.A.1, MP1, MP2, MP4, MP7	Addition, Base 10, Comparing Magnitude, Number Composition, Number Sense, Place Value, Subtraction, Volume, Vocabulary, Visual Numbers, Units, Unit Patterns, 3-Dimensional Thinking	Building Value is about building numbers within 1,000 using Base Ten Blocks. Your students are challenged to build the goal value by selecting the count of 100's, 10's, and 1's needed. Building Value centers around the concept of place value, which is key to success in multi-digit addition and subtraction and beyond.
 **Triangle Sort-A-Thon** live	Deep Understanding	Shape & Space	G3 - G5	2.G.A.1, 3.G.A.1, 4.G.A.1, 4.G.A.2, 4.G.A.3, 5.G.B.3, 5.G.B.4, MP6, MP7, MP8	Triangles, Triangle Attributes, Symmetry Line,Vocabulary	Triangle Sort A Thon challenges students to classify triangles by angle and side length using key geometric vocabulary: acute, right, obtuse, equilateral, isosceles, and scalene. Visuals include numeric and symbolic markings. A yellow "i" button provides simple definitions to support understanding of triangle attributes throughout the task.
 **Squad Quad Sort** live	Deep Understanding	Shape & Space	G3 - G5	2.G.A.1, 3.G.A.1, 4.G.A.1, 4.G.A.2, 4.G.A.3, 5.G.B.3, 5.G.B.4, MP6, MP7, MP8	Angles, Congruence, Geometry, Length, Measurement, Parallel, Polygons, Quadrilaterals, Symmetry Line, Shape Attributes, Spatial Reasoning, Vocabulary	Squad Quad Sort challenges students to classify quadrilateral attributes by key geometric markings for angle measures, side measures, as well as indicators of parallel sides. This task covers quadrilaterals' geometric vocabulary words: square, rectangle, rhombus, parallelogram, trapezoid, isosceles trapezoid, and kite.
 **Saddle Up Subtraction** live	Practice	Number Sense	G2 - G4	2.NBT.B.7, 3.NBT.A.2, 4.NBT.B.4, MP1, MP2, MP4, MP5, MP7, MP8	Subtraction, Base 10, Place Value, Area, Multi-digit Subtraction	Saddle Up Subtraction helps students learn multi-digit subtraction with regrouping. They see a subtraction problem alongside a base-ten block model of the minuend. Starting in the ones place, students regroup tens into ones or hundreds into tens when needed. The blocks dynamically adjust to match each step, reinforcing conceptual understanding.
 **Regroup Rodeo** live	Practice	Number Sense	G2 - G4	2.NBT.B.7, 3.NBT.A.2, 4.NBT.B.4, MP1, MP2, MP4, MP5, MP7, MP8	Base 10, Place Value, Area, Addition, Multi-digit Addition	Regroup Rodeo invites your students to explore multi-digit addition with regrouping. Starting in the ones place, they see sums that require trading ten ones for a ten or ten tens for a hundred. Animations make regrouping visible, helping students understand what it truly means to "carry the one" while reinforcing place value.
 **Trade Up** live	Practice	Number Sense	G2 - G4	2.NBT.B.7, 3.NBT.A.2, 4.NBT.B.4, MP1, MP2, MP4, MP5, MP7, MP8	Subtraction, Regrouping, Multi-Digit Arithmetic	Trade Up helps students make sense of multi-digit addition by breaking the algorithm into place-value steps. Using color-coded base ten blocks, students add ones, tens, and hundreds, carrying as needed. This visual and symbolic approach clarifies what it means to "carry the one," building deeper understanding beyond memorized procedures.
 **Trade Back** live	Practice	Number Sense	G2 - G4	2.NBT.B.7, 3.NBT.A.2, 4.NBT.B.4, MP1, MP2, MP4, MP5, MP7, MP8	Addition, Regrouping, Multi-Digit Arithmetic	Trade Back helps your students build conceptual understanding of multi-digit subtraction through visual regrouping. Students subtract ones, tens, and hundreds using color-coded cards, trading as needed to see how numbers decompose and re-form across place values. This hands-on approach makes subtraction meaningful and prepares for multi-digit reasoning.
 **Trade Big** live	Practice	Number Sense	G4 - G6	4.NBT.B.5, 5.NBT.B.5, MP1, MP4, MP5, MP7, MP8	Multiplication, Multi-digit Multiplication	Trade Big helps students understand multi-digit multiplication by showing how partial products build the final answer. Students multiply ones, tens, then hundreds on color-coded cards, trading rods across place values as needed. This makes regrouping visible and connects multiplication to place value, building strong conceptual understanding.
 **Classify The Crew** live	Practice	Patterns	G1 - G3	K.MD.B.3, 1.MD.C.4, MP1, MP2, MP7	Categorical Data, Attribute Matching, Comparison, Data, Generalizing Patterns, Sorting, Shape Attributes, Reasoning, Pattern Recognition	Classify the Crew introduces categorical data—traits grouped by labels rather than numbers. Each round, students sort a crew of emojis, each with unique attributes (shape, color, eyes, mouth, etc.). Multiple groupings are possible, but the key is students justifying choices—a core skill in data reasoning.
 **Tiny To Mighty** live	Practice	Shape & Space	K - G2	K.MD.A.1, K.MD.A.2, 1.MD.A.1, MP2, MP6	Measurement, Linear Measurement, Square Measurement, Length, Vocabulary, Comparison, Data, Shape Attributes	Tiny to Mighty helps your students explore measurable attributes and comparison language in an interactive way. Students resize objects by length, height, or size using the drag tool to match vocabulary labels like shorter or taller. This task builds understanding of ordering, comparing, and describing measurable attributes through hands-on reasoning.
 **Length Line-up** live	Practice	Shape & Space	G2	1.MD.A.1, 1.MD.A.2, 1.MD.C.4, 2.MD.A.1, 2.MD.D.9, 2.MD.D.10, MP2, MP6	Linear Measurement, Inches, Centimeters, Feet, Meters, Yards, Yard Stick, Meter Stick	In Length Line-Up, students measure and compare objects using tools such as rulers, yardsticks, and meter sticks. They rearrange items to match correct length labels, progressing from whole units to halves and quarters. Objects are intentionally paired with appropriate units, helping students build precision, reasonableness, and strong measurement sense.
Shrink & Stretch soon	Practice	Shape & Space	G3	TBA	Measurement	TBA

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Task Name	Type	Big Idea	Grades	CCSSM Codes	Content	Description
 **Shape Tales** soon	Practice	Patterns	G1 - G2	TBA	TBA	TBA
 **Shape Maker** soon	Deep Understanding	Shape & Space	G1 - G3	TBA	Shapes, Shape Attributes, Geometry, Draw Shapes	Students build and compare multiple versions of shapes by connecting points on changing grids. As shapes vary in form, students develop a deeper understanding of defining attributes. Shifts in grid structure and available points encourage strategic thinking, iteration, and spatial reasoning, supporting flexible, conceptually grounded geometric understanding.

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