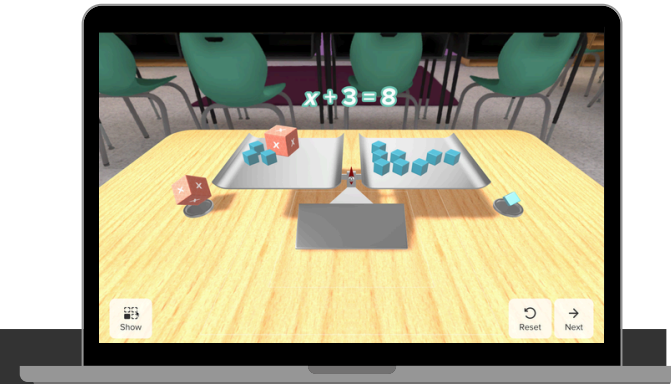
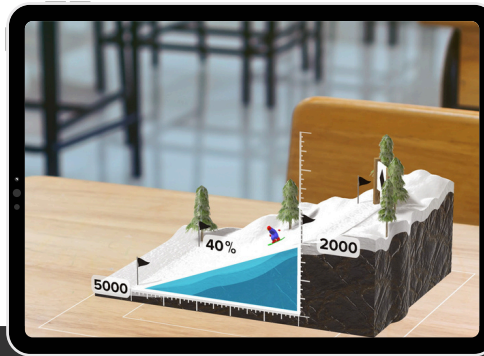


# MCGRAW HILL AR ALIGNMENT TO COMMON CORE STATE STANDARDS FOR MATHEMATICS (CCSSM)



ACTIVITY	CCSSM
<b>Division with Remainders</b>	CCSSM 3.OA. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem 3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = \square \div 3$ , $6 \times 6 = ?$ . 4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
<b>Equivalent Fractions</b>	CCSSM 4.NF.A.1 Explain why a fraction $a/b$ is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
<b>Coordinate Plane</b>	CCSSM 5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
<b>Add &amp; Subtract Fractions</b>	CCSSM 5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$ . (In general, $a/b + c/d = (ad + bc)/bd$ .)
<b>Ratios</b>	CCSSM 6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. 6.RP.A.2 Understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship.
<b>LCM</b>	CCSSM 6.NS.4 Find the least common multiple of two whole numbers less than or equal to 12.
<b>One-Step Equations</b>	CCSSM 6.EE.B.7 Solve equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.
<b>Two-Step Equations</b>	CCSSM 7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
<b>Nets</b>	CCSSM 6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. .
<b>Cross Sections</b>	CCSSM 7.G.A.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids. G.GMD.B.4 Identify the shapes of two-dimensional cross-sections of three-dimensional objects.

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Slope	CCSSM 8.F.B.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.
Reflections	CCSSM 8.G.A.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
Pythagorean Theory in 3D	CCSSM 8.G.B.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
Growth Functions	CCSSM F.LE.A.3 Observe using tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.
Parallel & Skew Lines	CCSSM G.CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. G.MG.1 Use geometric shapes, their measures, and their properties to describe objects.
Rotations	CCSSM G.GMD.B.4 Identify three-dimensional objects generated by rotations of two-dimensional objects.
Quadratic Functions	CCSSM HS.IF.7a Graph linear and quadratic functions and show intercepts, maxima, and minima.
Graph Theory	CCSSM MP.1 Make sense of problems and persevere in solving them. MP.4 Look for and make use of structure. MP.7 Model with mathematics.
Game Theory	CCSSM S.MD.6. Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). S.MD.7. Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). S.IC.6 Evaluate reports based on data.

