

Beast Academy Level 3

CCSS Alignment



The content covered in Beast Academy Level 3 is loosely based on the standards created by the Common Core State Standards Initiative.

For more information on the Common Core State Standards, visit www.corestandards.org.

Beast Academy Level 3 Chapters 1-12:

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| 1. Shapes | 7. Variables |
| 2. Skip-Counting | 8. Division |
| 3. Perimeter and Area | 9. Measurement |
| 4. Multiplication | 10. Fractions |
| 5. Perfect Squares | 11. Estimation |
| 6. The Distributive Property | 12. Area |

Grade 3 Common Core Standards	3A			3B			3C			3D		
	1	2	3	4	5	6	7	8	9	10	11	12
3.OA.A.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.				✓								
3.OA.A.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.								✓				
3.OA.A.3 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.A.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers.				✓		✓	✓	✓				
3.OA.B.5 Apply properties of operations as strategies to multiply and divide.				✓		✓		✓				
3.OA.B.6 Understand division as an unknown-factor problem.				✓				✓				
3.OA.C.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.				✓	✓			✓				



3.OA.D.8 Solve two-step word problems using the four operations. 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.		✓		✓		✓	✓					✓
3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.		✓	✓	✓			✓	✓			✓	
Number & Operations in Base Ten	1	2	3	4	5	6	7	8	9	10	11	12
3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100.											✓	
3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	In Chapters 3, 4, 8, and 11 of Beast Academy Level 2.											
3.NBT.A.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.				✓								
Number & Operations – Fractions	1	2	3	4	5	6	7	8	9	10	11	12
3.NF.A.1 Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.										✓		
3.NF.A.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.										✓		
3.NF.A.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.										✓		
Measurement & Data	1	2	3	4	5	6	7	8	9	10	11	12
3.MD.A.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.									✓			



<p>3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.</p>									✓			
<p>3.MD.B.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.</p>	<p>Beast Academy does not include bar graphs.</p>											
<p>3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.</p>									✓	✓		
<p>3.MD.C.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.</p>			✓		✓							✓
<p>3.MD.C.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p>			✓		✓							✓
<p>3.MD.C.7 Relate area to the operations of multiplication and addition.</p>			✓	✓	✓	✓						✓
<p>3.MD.D.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>			✓	✓	✓				✓			
<p>Geometry</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>	<p>5</p>	<p>6</p>	<p>7</p>	<p>8</p>	<p>9</p>	<p>10</p>	<p>11</p>	<p>12</p>
<p>3.G.A.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p>✓</p>											

3.G.A.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.												✓		
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Other Grades

The following Grade 2 goals of the Common Core State Standards are included in the content of Beast Academy Level 3.

Grade 2 Common Core Standards	3A			3B			3C			3D		
Operations & Algebraic Thinking	1	2	3	4	5	6	7	8	9	10	11	12
2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.		✓	✓	✓								
Measurement & Data	1	2	3	4	5	6	7	8	9	10	11	12
2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.									✓			
2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.									✓			
2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?									✓			
Geometry	1	2	3	4	5	6	7	8	9	10	11	12
2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	✓											
2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.			✓									

<p>2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>												✓	
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The following Grade 4 goals of the Common Core State Standards are included in the content of Beast Academy Level 3.

Grade 4 Common Core Standards	3A			3B			3C			3D		
Operations & Algebraic Thinking	1	2	3	4	5	6	7	8	9	10	11	12
4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.							✓					
Number & Operations in Base Ten	1	2	3	4	5	6	7	8	9	10	11	12
4.NBT.A.3 Use place value understanding to round multi-digit whole numbers to any place.											✓	
4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.								✓				
Number & Operations – Fractions	1	2	3	4	5	6	7	8	9	10	11	12
4.NF.A.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.										✓		



Measurement & Data	1	2	3	4	5	6	7	8	9	10	11	12
4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.									✓			
4.MD.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.					✓							
Geometry	1	2	3	4	5	6	7	8	9	10	11	12
4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	✓											
4.G.A.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	✓											

The following Grade 5 goals of the Common Core State Standards are included in the content of Beast Academy Level 3.

Grade 5 Common Core Standards	3A			3B			3C			3D		
Operations & Algebraic Thinking	1	2	3	4	5	6	7	8	9	10	11	12
5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.						✓						
5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.						✓						
Measurement & Data	1	2	3	4	5	6	7	8	9	10	11	12
5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.												✓

The following Grade 6 goals of the Common Core State Standards are included in the content of Beast Academy Level 3.

Grade 6 Common Core Standards	3A			3B			3C			3D		
	1	2	3	4	5	6	7	8	9	10	11	12
Expressions & Equations												
6.EE.B.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.							✓					
Geometry												
6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.												✓