

Cherry Creek Fifth Grade Math I Can Statements Term 1

Cluster	Concept	"I Can" Statement	Sample Problem
The Four Operations	Meaning of addition and subtraction	I can represent the meaning of the four operations using number sentences.	Find the difference of $5,123 - 199$.
	Meaning of multiplication and division		Find the sum of $392 + 88 + 127$.
	Order of operations		Draw a picture that shows this multiplication problem: $4 \times 7 = 28$ What operation would I use to figure out how many twelve-packs of soda I could make with 95 individual cans of soda? How do you know?
Place Value	The place value system is based on powers of ten	I can show different values for the same digit, depending on the size of the piece I use.	I have \$23.10, how many dollar bills would I need to make the value represented by the three? How many dimes would I need to represent the value of the three? How many pennies would I need to represent the value of the three? I would need 3 dollars (1 pieces), 30 dimes (1/10 pieces), or 300 pennies (1/100 pieces)
		I can show how exponents in powers of ten represent place value	Using powers of ten, show value of the one in 5,142. 1×10^3
		I can use what I know about powers of ten to figure out how many digits a multiplication or division problem will have.	How many zeroes will be in the answer to $5 \times 10,000$? Solve using mental math: 3.4×100 ?
Multiplication	Fluency with multiplication facts through 12's	I know my basic multiplication facts	$12 \times 3 =$ $5 \times 4 =$
	Multiplying Larger numbers	I can show multiplication of larger numbers using pictures and manipulatives	An elephant weighs 11 times more than me. I weigh 105 pounds. How much does the elephant weigh?
		I can multiply larger numbers using the traditional algorithm.	$ \begin{array}{r} 11 \\ 345 \\ \times 13 \\ \hline 1035 \\ +3450 \\ \hline 4485 \end{array} $

Cherry Creek 5th Grade Math I Can Statements Term 2

Cluster	Concept	"I Can" Statement	Sample Problem
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Measuring Area and Volume</p>	<p>The area of a square or rectangle can be found by multiplying the length by width.</p>	<p>I can find the area of squares and rectangles.</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>4 cm</p>  <p>7 cm</p> </div> <div style="text-align: center;">  <p>3.5cm</p> <p>6cm</p> </div> </div> <p>Fine the area of these shapes</p>
	<p>Volume of a cube or rectangular prism can be measured by filling it completely with cubic units.</p>	<p>I can find the volume of a rectangular or square prism by filling it with cubes.</p>	<p>How many 1 cm cubes would I need to completely fill a box that is 10 cm wide, 3 cm deep and 5 cm tall?</p>
	<p>The volume of a rectangular prism can be found by multiplying the length, width and height together. $V = lwh$</p>	<p>I can figure out and use a formula to find the volume of rectangular and square prisms</p>	<p>Use the formula for area to find the area of a box that is 3 in by 5 in by 10 in.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Division</p>	<p>Knowing the relationship between multiplication and division can help me solve multiplication and division problems</p>	<p>I can show how multiplication and division are opposites</p>	<p>How can knowing $10 \times 5 = 50$ help you figure out 58 divided by 5?</p>
	<p>Division uses the same processes, regardless of the numbers used.</p>	<p>I can divide larger numbers just like I divide smaller ones and explain my process.</p>	<p>Mr. Duncan gave our class 451 Otter Pops. There are 34 students in our class. If we share the Otter Pops fairly, how many Otter Pops will each student get?</p>
	<p>Fractions and division are different representations of the same process.</p>	<p>I can show fractions are just another way to show division.</p>	<p>What fraction can I use to show 1 sandwich shared with 3 people? Prove it.</p> <p>Describe how to find a whole number equivalent for $45/9$.</p>

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Fractions	You must find equivalent fractions with the same denominators in order to add or subtract the fractions together.	I can add and subtract fractions with unlike denominators and show my work.	Addition: If Ashley has $\frac{1}{12}$ of a candy bar and Nicole gives her $\frac{1}{6}$ more, how much of a whole candy bar will Ashley have now? Subtraction: Chris has $\frac{1}{2}$ of a whole cookie. If he gives Mckella $\frac{1}{3}$ of a whole cookie, how much of a whole cookie will Chris have left?																																						
		I can find equivalent fractions	I need to put $\frac{1}{2}$ cup of sugar in a recipe. I only have: $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$, $\frac{1}{10}$, and $\frac{1}{12}$ cup measuring cups. How many ways can I use these cups to measure up to $\frac{1}{2}$ cup?																																						
		I can use equivalent fractions to make two different fractions have the same denominator.	<p style="text-align: center;">Find equivalent fractions for $\frac{1}{2}$ and $\frac{1}{3}$ that both have the same denominator</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> $\frac{1}{3}$ <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr><td>1</td><td>3</td></tr> <tr><td>2</td><td>6</td></tr> <tr><td>3</td><td>9</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>15</td></tr> <tr><td>6</td><td>18</td></tr> <tr><td>7</td><td>21</td></tr> <tr><td>8</td><td>24</td></tr> <tr><td>9</td><td>27</td></tr> <tr><td>10</td><td>30</td></tr> </table> </div> <div style="text-align: center;"> $\frac{1}{2}$ <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr><td>1</td><td>2</td></tr> <tr><td>2</td><td>4</td></tr> <tr><td>3</td><td>6</td></tr> <tr><td>4</td><td>8</td></tr> <tr><td>5</td><td>10</td></tr> <tr><td>6</td><td>12</td></tr> <tr><td>7</td><td>14</td></tr> <tr><td>8</td><td>16</td></tr> <tr><td>9</td><td>18</td></tr> <tr><td>10</td><td>20</td></tr> </table> </div> </div> <p style="text-align: center;">To find equivalent fractions with the same denominator:</p> <ol style="list-style-type: none"> 1. List the multiples of each denominators in separate T-charts 2. Find numbers on the right side of each T-chart that are the same. This is the number for the new denominator. 3. Multiply each fraction by a fraction equivalent to one to find an equivalent fraction with the new denominator. <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\frac{1}{3} \times \frac{2}{2} = \frac{2}{6}$ </div> <div style="text-align: center;"> $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$ </div> </div>	1	3	2	6	3	9	4	12	5	15	6	18	7	21	8	24	9	27	10	30	1	2	2	4	3	6	4	8	5	10	6	12	7	14	8	16	9	18
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Cherry Creek 5th Grade Math "I Can" Statements Term 3

Cluster	Concept	"I Can" Statement	Sample Problem
Fractions	You must find equivalent fractions with the same denominators in order to add or subtract the fractions together.	I can add and subtract fractions with unlike denominators and show my work.	<p>Addition: If Ashley has $\frac{1}{12}$ of a candy bar and Nicole gives her $\frac{1}{6}$ more, how much of a whole candy bar will Ashley have now? Subtraction: Chris has $\frac{1}{2}$ of a whole cookie. If he gives Mckella $\frac{1}{3}$ of a whole cookie, how much of a whole cookie will Chris have left?</p> <p>For the above question, you would solve it this way. Addition: Step 1) $\frac{1}{12} + \frac{1}{6} =$, Step 2) Find the equivalent fraction using the T-chart method from Term 2, Step 3) $\frac{1}{12} + \frac{2}{12} = \frac{3}{12}$, Step 4) Simplify to $\frac{1}{4}$; Subtraction: Step 1) $\frac{1}{2} - \frac{1}{3} =$, Step 2) Find the equivalent fraction using the T-chart, 3) $\frac{3}{6} - \frac{2}{6} = \frac{1}{6}$, Step 4) Simplify (but you don't need to in this one)</p>
	All mathematical situations can be represented with equations.	I can write math sentences to represent real-world addition and subtraction problems.	For the above questions, the equations would be: $\frac{1}{12} + \frac{1}{6} = \frac{1}{4}$ $\frac{1}{2} - \frac{1}{3} = \frac{1}{6}$
	Multiplication of fractions can be represented visually, modeled concretely, and calculated by counting groups of fractions.	I can multiply whole numbers by fractions using pictures, arrays, and counting groups of fractions.	Solve $\frac{1}{3} \times 11$. Make, draw and write how you know.
		I can multiply fractions by fractions using pictures, arrays and counting fractional parts of fractions.	Solve $\frac{1}{2} \times \frac{1}{4}$. Make, draw and write how you know.
		I can find the area of a rectangle, even if the sides have fractional measurements.	My yard is 40 feet wide and $10 \frac{1}{2}$ feet long. How many square feet of sod do I need to cover my yard completely?
	The numbers I multiply have a direct and predictable relationship to the answer I get.	I can show how changing one number I multiply will change the answer of a multiplication problem.	$9 \times 3 = 27$. Will the answer to $9 \times \frac{15}{3}$ be greater, less than, or equal to 9×3 ? Explain how you know. Will the answer to $9 \times \frac{1}{3}$ be greater, less than or equal to 9×3 ? Explain how you know.
		I can use what I know about multiplying numbers by fractions to know if the answer to a multiplication problem will be greater than or less than the whole number I'm multiplying.	$9 \times 3 = 27$. Will the answer to $9 \times \frac{15}{3}$ be greater, less than, or equal to 9? Explain how you know. Will the answer to $9 \times \frac{1}{3}$ be greater, less than or equal to 9? Explain how you know.
	Dividing fractions can be represented with pictures.	I can use pictures to show the division of fractions.	Draw a picture to figure out $\frac{1}{2}$ shared with 5 people.

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	<p>Mathematical equations are used to represent real-world mathematical situations.</p>	<p>I can write math sentences to represent real-world multiplication and division of fractions problems.</p>	<p>Write a math sentence to show how to solve the following problems:</p> <p>I have $\frac{1}{2}$ a pizza left in the fridge. If 5 people share the $\frac{1}{2}$ pizza, how much of a whole pizza will each person get?</p> <p>I want to give each of my friends $\frac{1}{3}$ of a candy bar. I have 6 friends. How many candy bars will I have to buy?</p>															
	<p>Line plots are a useful way to represent fractional data.</p>	<p>I can make and use a line plot with fractional measurements.</p>	<p>I have a recipe that calls for $\frac{1}{2}$ c. cocoa, $\frac{1}{3}$ c. white sugar, $\frac{1}{3}$ c. brown sugar, $\frac{1}{4}$ c. peanuts, $\frac{1}{2}$ c. peanut butter, and $\frac{1}{2}$ c. oats. Make a line plot showing how many times I use each size measuring cup.</p> <div style="text-align: center;"> <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td></td> <td align="center">X</td> <td></td> </tr> <tr> <td></td> <td></td> <td align="center">X</td> <td align="center">X</td> </tr> <tr> <td align="center">X</td> <td></td> <td align="center">X</td> <td align="center">X</td> </tr> <tr> <td align="center">1/4</td> <td></td> <td align="center">1/3</td> <td align="center">1/2</td> </tr> </table> </div>			X				X	X	X		X	X	1/4		1/3
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<p>What Are Decimals?</p>	<p>Reading, writing, comparing and rounding decimals.</p>	<p>I can read and write decimals to the thousandths place using several different forms.</p>	<p>Write 3.14 in word form. Write 4.05 in expanded form. Write five hundred, three and twenty-one hundredths in standard form.</p>															
		<p>I can use visual models and the correct symbols to compare decimals to the thousandths.</p>	<p>Draw a picture and write a math sentence that compares 1.45 to 1.5.</p>															
		<p>I can model rounding decimals to any place.</p>	<p>Draw a picture to show how to round 4.56 to the tenths place.</p>															
<p>Decimal Operations</p>	<p>Using the four operations on decimal numbers.</p>	<p>I can add decimals to the hundredths place.</p>	<p>Make, draw and write the answer for $54.23 + 1.5$</p>															
		<p>I can subtract decimals to the hundredths place.</p>	<p>Make, draw and write the answer for $54.23 - 1.5$</p>															
		<p>I can multiply decimals to the hundredths place.</p>	<p>Make, draw and write the answer for $3.14 \times .06$</p>															
		<p>I can divide decimals to the hundredth place.</p>	<p>Make, draw and write the answer for 5.16 divided by 3</p>															

Term 4

Cluster	Concept	"I Can" Statement	Sample Problem
Coordinate Planes	Fluently using a coordinate plane system in the first quadrant.	I can make and label a coordinate plane.	<p>Create a coordinate plane. Label the following: x-axis, y-axis, origin. Put a star at (5,3). Put a dot at (2,6). Put an X at (4,1). If I started at the dot, would I have to travel further to go to the star or the X? Explain how you know.</p> <p>Springville is designed like a coordinate plane. Main Street is the x-axis and Center Street is the y-axis. The Art Museum would be located at (4,2). Pier 49 Pizza would be at (3,0). My house is 3 blocks north of Pier 49 Pizza and 3 blocks east of the Art Museum. What would the coordinates for my house be?</p>
		I can label a set of coordinates on a coordinate plane.	
		I can show movement along a coordinate plane because I know how a number line works.	
		I can show real world situations using a coordinate plane.	
Patterns	Determining rules for, graphing, and predicting patterns.	I can figure out the rule for a pattern and compare that pattern with a different pattern.	<p>Emily graphed the following pattern on a coordinate plane: (0,2), (1,3), (2,4), (4,6). Ethan graphed this pattern on a coordinate plane: (0,3), (1,4), (2,5), (4,7).</p> <p>What is the rule for Emily's pattern? For Ethan's? How are their patterns different? What will the y coordinate be for each pattern when the x coordinate is 10? If Emily connected her points with a line and Ethan connected his dots with a line, would their lines ever cross? Explain how you know.</p>
		I can graph a pattern on a coordinate plane	
		I can use the graph of a pattern to predict what comes next.	
Measurement	Converting measurements within the same system.	I can convert one unit of measurement to another.	5 ft. = _____ in. 465 cm. = _____ m.
Geometry	Understanding two-dimensional geometric shapes.	I can classify two-dimensional shapes.	<p>Which of the following shapes are rectangles? Explain your answer.</p> 
		I can create a two-dimensional shape, if I'm given a list of attributes of the shape.	Draw a quadrilateral with 1 set of parallel lines and one right angle.