

Fall 2021-22 Grade 3 Math Virginia Growth Assessment SDBQ Analysis

Grade	Reporting Category	Item Description	All Item Difficulties			Low Difficulty			Medium Difficulty			High Difficulty		
			Correct%	Incorrect%	Total Responses	Correct%	Incorrect%	Total Responses	Correct%	Incorrect%	Total Responses	Correct%	Incorrect%	Total Responses
Grade 3 Mathematics	Computation and Estimation	Create or solve practical problems involving basic multiplication or division facts.	0.0%	100.0%	1				0.0%	100.0%	1			
		Create or solve practical problems involving multiplication.	0.0%	100.0%	1	0.0%	100.0%	1	0.0%	100.0%	1			
		Recall multiplication facts.	0.0%	100.0%	1				0.0%	100.0%	1			
		Solve problems involving addition or subtraction of proper fractions with like denominators using models.	36.2%	63.8%	2,025	36.0%	64.0%	1,735	36.2%	63.8%	257	48.5%	51.5%	33
		Solve problems involving estimation, addition, or subtraction of whole numbers.	46.6%	53.4%	4,045	45.2%	54.8%	3,438	53.8%	46.2%	586	66.7%	33.3%	21
		Solve single-step and multistep practical problems involving estimation, sums, and differences of whole numbers.	43.1%	56.9%	4,046	40.8%	59.2%	3,508	57.9%	42.1%	506	62.5%	37.5%	32
		Use a variety of models to represent multiplication or division facts.	0.0%	100.0%	1	0.0%	100.0%	1						
	<b>Computation and Estimation Total</b>	<b>43.1%</b>	<b>56.9%</b>	<b>10,120</b>	<b>41.6%</b>	<b>58.4%</b>	<b>8,683</b>	<b>51.9%</b>	<b>48.1%</b>	<b>1,351</b>	<b>58.1%</b>	<b>41.9%</b>	<b>86</b>	
	Measurement and Geometry	Compare values of sets of coins and bills and make change.	55.6%	44.4%	4,046	54.4%	45.6%	3,389	61.8%	38.2%	657			
		Describe the polygons resulting from combining or subdividing figures.	0.0%	100.0%	1				0.0%	100.0%	1			
		Estimate or determine liquid volume in U.S. Customary or metric units.	0.0%	100.0%	1	0.0%	100.0%	1						
		Estimate or determine the perimeter or area of a given figure.	50.0%	50.0%	2	100.0%	0.0%	1	0.0%	100.0%	1			
		Estimate or measure length in U.S. Customary or metric units.	35.0%	65.0%	2,023	31.6%	68.4%	1,656	49.5%	50.5%	323	56.8%	43.2%	44
		Identify congruent and noncongruent figures with different spatial orientations.	0.0%	100.0%	1	0.0%	100.0%	1						
		Identify points, line segments, rays, angles, and lines.	27.3%	72.7%	2,023	28.3%	71.7%	1,705	25.1%	74.9%	259	6.8%	93.2%	59
		Read temperature to the nearest degree on thermometers with varied increments.	49.6%	50.4%	2,023	51.9%	48.1%	1,700	37.8%	62.2%	323			
		Solve practical problems to determine elapsed time in one-hour increments.	0.0%	100.0%	1				0.0%	100.0%	1			
	Tell time to the nearest minute.	47.7%	52.3%	2,022	47.6%	52.4%	1,747	48.7%	51.3%	275				
	<b>Measurement and Geometry Total</b>	<b>45.1%</b>	<b>54.9%</b>	<b>12,143</b>	<b>44.7%</b>	<b>55.3%</b>	<b>10,200</b>	<b>48.2%</b>	<b>51.8%</b>	<b>1,840</b>	<b>28.2%</b>	<b>71.8%</b>	<b>103</b>	
	Number and Number Sense	Compare and order whole numbers.	62.9%	37.1%	2,024	63.1%	36.9%	1,801	61.0%	39.0%	223			
		Compare fractions using models, words, and/or symbols.	50.7%	49.3%	2,024	50.7%	49.3%	2,022	50.0%	50.0%	2			
		Interpret the place and value of each digit of a whole number.	29.9%	70.1%	1,102	29.9%	70.1%	1,102						
		Model fractions and mixed numbers.	34.8%	65.2%	952	34.9%	65.1%	948	0.0%	100.0%	4			
		Read and write numbers with no more than six digits.	26.3%	73.7%	921	26.3%	73.7%	921						
		Round numbers to a specified place value.	56.7%	43.3%	2,024	56.7%	43.3%	2,024						
		Write and represent fractions and mixed numbers using models.	46.8%	53.2%	1,073	46.7%	53.3%	1,072	100.0%	0.0%	1			
	<b>Number and Number Sense Total</b>	<b>47.9%</b>	<b>52.1%</b>	<b>10,120</b>	<b>47.7%</b>	<b>52.3%</b>	<b>9,890</b>	<b>60.0%</b>	<b>40.0%</b>	<b>230</b>				
	Probability, Statistics, Patterns, Functions, and Algebra	Analyze and interpret information presented in a bar graph or pictograph.	64.0%	36.0%	372	67.3%	32.7%	217	59.4%	40.6%	155			
		Construct or identify a bar graph or pictograph that represents collected data.	65.9%	34.1%	1,026	66.4%	33.6%	987	53.8%	46.2%	39			
		Demonstrate equality in equations.	60.9%	39.1%	2,023	60.2%	39.8%	1,713	63.7%	36.3%	284	80.8%	19.2%	26
		Design data investigations.	62.4%	37.6%	364	57.5%	42.5%	261	77.2%	22.8%	57	71.7%	28.3%	46
		Identify the likelihood of an event.	46.8%	53.2%	1,831	45.1%	54.9%	1,682	65.1%	34.9%	149			
		Identify the missing element in a pattern.	65.5%	34.5%	1,146	65.0%	35.0%	1,105	80.5%	19.5%	41			
Organize a collection of data.		62.0%	38.0%	263	62.9%	37.1%	245	50.0%	50.0%	18				
Recognize, describe, and extend patterns in various forms.		58.7%	41.3%	879	52.4%	47.6%	586	71.3%	28.7%	293				
Represent all possible outcomes of an event.	72.5%	27.5%	193				72.5%	27.5%	193					
<b>Probability, Statistics, Patterns, Functions, and Algebra Total</b>	<b>59.3%</b>	<b>40.7%</b>	<b>8,097</b>	<b>57.7%</b>	<b>42.3%</b>	<b>6,796</b>	<b>67.2%</b>	<b>32.8%</b>	<b>1,229</b>	<b>75.0%</b>	<b>25.0%</b>	<b>72</b>		
<b>Gr 3 Mathematics Total</b>	<b>48.1%</b>	<b>51.9%</b>	<b>40,480</b>	<b>47.2%</b>	<b>52.8%</b>	<b>35,569</b>	<b>54.9%</b>	<b>45.1%</b>	<b>4,650</b>	<b>51.0%</b>	<b>49.0%</b>	<b>261</b>		