

Grade K -- West Virginia College- and Career-Readiness Standards

G								0		-0-							
	ucation MATHEMATICS	Know num	ber names an sequence.	d the count	Cou	int to tell the i	number of obj	ierts	Compare	numbers	Understand	l addition as put	ting together an s taking apart ar		d understand		umbers 11-19 to gain ns for place value.
No	Unit/Lesson	M.K.1	M.K.2	M.K.3	M.K.4a	M.K.4b	M.K.4c	M.K.5	M.K.6	M.K.7	M.K.8	M.K.9	M.K.10	M.K.11	M.K.12	Touridatio	M.K.13
0.1.0		IVI.IX. I	IVI.IN.Z	WI.K.J	WI.N.4a	WI.IX.40	WI.IX.46	WI.IX.J	IVI.IX.0	IVI.IX.I	WI.N.O	WI.N.3	WLIX. TO	WLIN. I I	WI.IX. 12		WLN. 15
0.1.0	Count 1-4	_		_	√	✓	√	√									
0.1.1	Count 1-5					V V	↓ v	v √									
					 ✓	✓ ✓		✓ ✓									
0.1.3	Count 1-7				 ✓			✓ ✓									
0.1.4	Count 1-9				 												
0.1.5	Count 1-10					-	-	✓ ✓									
0.1.6	Count 0-10				√	✓	√	✓ ✓									
0.1.7	Represent 0-2				1	<u> </u>	√	✓ ✓									
0.1.8	Represent 0-5			√ 	✓	───	√	✓ ✓									
0.1.9	Represent 0-8			√	✓ ✓	───	√	✓ ✓									
0.1.10	•	_		√	√		✓	√								_	
0.2.0	Numbers to 20																
0.2.1	Count and Represent 0-13			√ 	I	 	<u> </u>	✓ ✓									
0.2.2	Count and Represent 0-16			√	I	───	──	✓ ✓									
0.2.3	Count and Represent 0-19			√ 	 	───	<u> </u>	✓ ✓									
0.2.4	Count and Represent 0-20			√				~									
	•																
0.3.1	Match to Find More				I	<u> </u>	<u> </u>		√								
0.3.2	More, Fewer, and Same Amounts				I	<u> </u>	<u> </u>	L	√								
0.3.3	Count to Find the Greater Number				I	<u> </u>	<u> </u>	L	√	✓							
0.3.4	Compare Two Numbers				I	<u> </u>	Ļ	L	√	✓							
0.3.5	Compare within 5				I	<u> </u>	Ļ			√							
0.3.6	Compare within 10				 	L	L			√							
0.4.0	Understand Addition within 10																
0.4.1	Represent Addition within 5				I	<u> </u>		L			✓	√					
0.4.2	Put Together Groups within 5				ļ		L				√	√			✓		
0.4.3	Explore Number Pairs for 0–5				I	<u> </u>	Ļ	L					√				
0.4.4	Explore Number Pairs for 6–9				I	L	L						√				
0.4.5	Explore Number Pairs for 10				I	<u> </u>	Ļ	L					√	√			
0.4.6	Find Numbers that Make 10				I	<u> </u>	Ļ	L						√			
0.4.7	Represent Addition within 10				I	L	L				✓	√					
0.4.8	Put Together Groups within 10				L		L				√	√					
0.5.0	Understand Subtraction within 10																
0.5.1	Decompose Numbers within 5				 		L				~		√				
0.5.2	Represent Subtraction within 5				i	───		 			√	✓ ✓					
0.5.3	Solve Subtraction Equations within 5				I	 	<u> </u>	<u> </u>			✓	√	-		✓		
0.5.4	Decompose Numbers 6–9				i	───	<u> </u>	<u> </u>					√				
0.5.5	Represent Subtraction within 9				i	───	 	 			√	√			ļ		
0.5.6	Solve Subtraction Equations within 9				i		<u> </u>	L			✓	√		<u> </u>	ļ		
0.5.7	Decompose 10				 			L			✓		√	√			
0.5.8	Solve Subtraction Problems within 10				L	L	<u> </u>	L			√	√					
0.6.0	Place Value with Teen Numbers																-
0.6.1	Show 11–14 as 10 Ones and Some More				 		<u> </u>	L									✓
0.6.2	Show 15–19 as 10 Ones and Some More				 	<u> </u>	<u> </u>	L									\checkmark
0.6.3	Teen Numbers with Drawings and Equations				 	L	Ļ	L									\checkmark
0.6.4	Compose and Decompose Teen Numbers				L	\square	L										√
0.7.0																	
0.7.1	One Less/One More				 	L	✓	\vdash									
0.7.2	Count to 100 by Ones	√			 		L	L									
0.7.3	· · · · · · · · · · · · · · · · · · ·	√			 			L									
0.7.4	Count Forward		✓		<u> </u>												

N	w REDBIRD			Gra	ade 1	Wes	t Vir	ginia	Colle	ege- ar	nd Ca	reer-F	leadir	ness S	Stanc	lards			
	ucation MATHEMATICS	problems inve	t and solve olving addition otraction.	Understand and a operations and between addition	the relationship	Add and withi	subtract n 20.	Work with a subtraction		Extend the counting sequence.		Understand	place value.			value unders of operations subtract.		Measure indirectly iterating let	y and by
No.	Unit/Lesson	M.1.1	M.1.2	M.1.3	M.1.4	M.1.5	M.1.6	M.1.7	M.1.8	M.1.9	M.1.10a	M.1.10b	M.1.10c	M.1.11	M.1.12	M.1.13	M.1.14	M.1.15	M.1.16
1.1.0	Problem Solving: Addition																		
1.1.1	Model Joining Stories (to 5)	√																	
1.1.2	Ways to Make 6 and 7	√					√												
1.1.3	Ways to Make 8 and 9	√					√												
1.1.4	Model Joining Stories (to 9)	√	√				√												
1.1.5	Commutative Property and Add Zero Property			✓			√												
1.1.6	Ways to Make 10	√					√		√										
1.1.7	Model Equations to Represent Addition Stories	√					√		~										
1.1.8	Write Equations to Represent Addition Stories	√					√		√										
1.2.0	Problem Solving: Subtraction																		
1.2.1	Addition and Subtraction Fact Families	√				~	√		~										
1.2.2	Model Take From Stories	√			✓		√		~										
1.2.3	Find Missing Parts of 7 and 8	1			1		1		1			1		1					
1.2.4	Model Equations to Represent Subtraction Stories	√					√		√ 										
1.2.5	Find Missing Parts of 9 and 10	√			√		√		√										
1.2.6	Model Take-Apart/Separating Stories	√			✓		√		√										
1.2.7	Write Equations to Represent Subtraction Stories	√					√		√										
1.2.8	Compare Stories	√			√		√		✓										
1.2.9	Relate Addition and Subtraction	1			1		1		1										
1.3.0	Addition and Subtraction Strategies				-														
1.3.1	Count On					1	√												
1.3.2	Use a Known Fact to Add						√												
1.3.3	Related Subtraction Facts through 12				√														
1.3.4	Use 10 to Subtract				•		√												
1.3.5	Related Subtraction Facts through 20	√			√		√												
1.3.6	Find Unknowns on Addition Table	· ·							1										
1.4.0	More Work with Addition					_			•										
1.4.1	Numbers Related to 10			1			√		√										
1.4.2	Make 10 to Add 7 and 8			•			√		•										
1.4.3	Make 10 to Add 9						√												
1.4.4	Use Strategies to Add					1	↓												
1.4.5	Add Three Addends		1	1		•	•												
1.4.6	Addition and Subtraction Equations		• •	v	✓		√		~										
1.4.0	Understand Place Value	_			v	_	•	• •	•										
1.5.0	Count Forward to 120									√									
1.5.1	Teen Numbers									•	✓	~							
1.5.2	Tens and Ones										v		~						
1.5.4	Make Numbers with Tens and Extras											L V	~	-					
1.5.4	Compare Numbers through Hundreds										- *		v	1					
1.5.5	Read and Write Numbers									√				- `					
1.5.0		Subtract								v									
1.6.1	Add Two Multiples of 10	Subtract													1				
1.6.1	Add Two Multiples of 10 Add a Multiple of 10 to a 2-Digit Number on a Hundred Ch	art										<u> </u>		<u> </u>	✓ ✓				
1.6.2	Add a Multiple of 10 to a 2-Digit Number on a Hundred Ch Add a Multiple of 10 to a 2-Digit Number													<u> </u>	✓ ✓				
															✓ ✓				
1.6.4	Add 2-Digit Numbers Subtract Multiples of 10 from Multiples of 10					_								<u> </u>	V		1		
1.6.5 1.7.0																	V		
1.7.1	Skip-Counting					 √													
1.7.2	Add or Subtract 1 and 10 on a Number Chart					V										<i>✓</i>		,	
1.7.3	Compare and Order Lengths											l		 				√	1
1.7.4	Measure Length with Same-Size Units											1		1					v



Grade 2 -- West Virginia College- and Career-Readiness Standards

Hi Ed		Represent and solve problems involving addition and subtraction.	Add and subtract within 20. M.2.2	M 2.5a		stand place v					dd and subt	ract.		s	ind estimate tandard unit	s.	subtraction	dition and n to length.
-	Unit/Lesson	M.2.1	M.2.2	M.2.5a	M.2.5b	M.2.6	M.2.7	M.2.8	M.2.9	M.2.10	M.2.11	M.2.12	M.2.13	M.2.14	M.2.16	M.2.17	M.2.18	M.2.19
	Use Models to Add and Subtract			_					· ·									
2.1.1			✓ ✓								√ √							└──── ┦
	Use the Addition Table to Add and Subtract																	└─── ┦
	Find Missing Addends with the Hundred Chart										✓ ✓							└─── ┦
	Add and Subtract with the Hundred Chart Add and Subtract within 20 Using Base Ten Blocks										 ✓							┝────┦
	-	√	✓ ✓															┟────┦
	Add and Subtract within 20 Using the Number Line Add and Subtract within 100 Using Base Ten Blocks	V	- V								 ✓							
		√									- V - V							
	Use Tape Diagrams to Add	 ✓									- V - V							
	Use Tape Diagrams to Add and Subtract	 ✓									v							
	Use Strategies to Add and Subtract	•		_							v							
2.2.1	Make a Ten to Add	√	1						1		1		1					
2.2.2	Make a Ten to Subtract	, ,	· ·															
2.2.2	Two-step Problems	 ✓									v		✓ ✓					
2.2.4	Make a Simpler Problem to Add	•							· ·									
2.2.5	Make a Simpler Problem to Subtract								· ·				√					
	Problem Solving with Sums to 100	√											✓					
2.2.7	Problem Solving with Sums and Differences to 100	√											✓				1	
	Numbers to 1000 and Place Value										-		-					
	Numbers through 100						√											
2.3.2	Numbers through 1000			√	✓		√											
2.3.3	Represent Numbers on a Number Line					√	√											
2.3.4	Compare Numbers Using Place Value						√	√										
2.4.0	Addition with Multi-Digit Numbers																	
	Add Tens to 2-Digit Numbers								√		√							
2.4.2	Find Sums of 2-Digit Numbers								 ✓ 		√		√					
2.4.3	Use Strategies to Add 3-Digit Numbers										√	~	√					
2.4.4	Add Tens to 3-Digit Numbers										✓	~						
2.4.5	Find Sums of 3-Digit Numbers										√							
2.4.6	Find Sums of Multi-Digit Numbers										√							
2.4.7	Find Sums of More than Two Numbers									✓	√		√					
2.4.8	Problem Solving with Addition	√							✓	✓	√							
	Subtraction with Multi-Digit Numbers																	
	Decompose to Subtract 2-Digit Numbers								✓		✓							
2.5.2	°								✓		✓		√					
	Problem Solving with 2-Digit Numbers	√							✓		✓							ļ!
	, , , , , , , , , , , , , , , , , , ,										✓	✓	✓					ļ]
2.5.5	Subtract Tens from 3-Digit Numbers										✓	✓						ļļ
2.5.6	Subtract 3-Digit Numbers										√							ļļ
2.5.7	Subtract Multi-Digit Numbers										~		\checkmark					
-	Measure Length			_														
2.6.1	Measurement Tools													✓ ✓				└─── ┦
2.6.2	Lengths in Inches and Feet								-					√ √	√ √			└─── ┦
2.6.3	-														~			
2.6.4	Compare Lengths													~				
	Add and Subtract Lengths	√	√						1								√	✓
2.7.1	Find the Sums of Lengths Find the Differences of Lengths	√ √														1	 _ ✓	
	Problem Solving with Lengths	 ✓														v	 ✓	
	Compare Problems with Lengths	 ✓														1	 ✓	┝────┦
2.7.4	Compare Froblems with Lengths	v	v						l v							v	v	í

Mc							Grade	3 W	est Vir	ginia	Colle	ege-	and C	Caree	er-Re	adine	ess S ^r	tand	ards						
Graw Hill Education REDBIRD		nt and solve			multiplicati	properties of ion and the ip between and division.	Multiply and divide within 100.	four operations	ns involving the , and identify and ns in arithmetic.		Devel	lop understa	nding of frac	tions as nur	nbers.		Solve pr invol measurer estim	ving nent and	Geon	netric measu		derstand con cation and to		a and relate ar	rea to
No. Unit/Lesson	M.3.1	M.3.2	M.3.3	M.3.4	M.3.5	M.3.6	M.3.7	M.3.8	M.3.9	M.3.13			M.3.15a			M.3.15d	M.3.16	M.3.17	M.3.20a	M.3.20b	M.3.21		M.3.22b	M.3.22c	M.3.22d
3.1.0 Understand Multiplication																									
3.1.1 Equal Groups: Repeated Addition	1		1	1			1																		
3.1.2 Equal Groups: Unknown Items Per Group	✓			✓																					
3.1.3 Equal Groups: Unknown Number of Groups	1		1	1			1																		
3.1.4 Equal Groups: Rows	√		✓	√																					
3.1.5 Equal Groups: The Array Model	✓		- -				1																		
3.1.6 Commutative Property of Multiplication			✓	✓	1																				
3.1.7 Multiplicative Identity Property and Zero Property of Multiplication			1	1	1		1																		
3.1.8 Problem Solving with Multiplication																									
3.2.0 Concept of Area																									
3.2.1 Compare Areas of Rectangles																			1	1	~				
3.2.2 Tile Rectangles to Find Area																				1		1	1	,	
3.2.3 Area Formula																				•	, ,	1	1	$ \longrightarrow $	
3.2.4 Decompose a Rectangle to Find Area																					•		1		
3.2.5 Area with Customary Units			1																				1		
3.2.6 Area with Metric Units			I V																				1		
3.2.7 Decompose Figures to Find Area			- ·																				1	$ \rightarrow$	1
3.3.0 Patterns in Multiplication																							•		v
3.3.1 Multiply by 2				1			1		1																
3.3.2 Multiply by 3 and 5							1		, ,																
3.3.3 Introduction to Multiplication Tables				\checkmark			× √		v																
3.3.4 Use Multiplication Tables				√			1		, ,																
3.3.5 Basic Multiplication Facts					1		1		v																
3.3.6 Patterns in the Multiplication Table				√	v		1		J																
3.3.7 Learn Multiplication Facts					 ✓		× ✓		v																
3.4.0 Understand Division				~	v		, v																		
3.4.1 Equal Groups: Unknown Items Per Group		1	1	1			1																		
3.4.2 Equal Groups: Unknown Number of Groups		V V	V V																						
3.4.3 Equal Groups: Tape Diagrams						1	× ✓																		
3.4.4 Equal Groups: Arrays		V V	V V			- V - V	×																		
3.4.5 Problem Solving with Related Facts		- v				- V - V	× ✓																		
3.5.0 Use Mixed Operations to Solve Problems				~		v	v			_					_				_						
3.5.1 Order of Operations with Parentheses				_				√		_															
3.5.2 Order of Operations with Parentheses																									
3.5.3 Associative and Commutative Properties					1			v																	
3.5.4 Multiples of Ten*					 ✓		-		1																
3.5.5 Tape Diagrams			1		v		1		v																
3.5.6 Problem Solving with Mixed Operations							✓ ✓	1																	
3.5.6 Problem Solving with Mixed Operations 3.6.0 Measurement: Time, Volume, and Mass							×	v																	
3.6.1 Tell Time				_						_							1				_				
3.6.2 Problem Solving with Elapsed Time																	✓ ✓								
3.6.3 Liquid Volume																	v	~							
3.6.4 Mass																		× ×							
3.6.4 Mass 3.7.0 Fraction Concepts								_		_								~	_		_				
3.7.0 Fraction Concepts 3.7.1 Model Equal Parts										1															
3.7.1 Model Equal Parts 3.7.2 Use Fraction Bars to Name Fractions										\checkmark															
	-									✓ ✓															
3.7.3 Use Fraction Rectangles and Circles to Name Fractions 3.7.4 Find Equivalent Fractions										~			1	1											
													~	~		,									
3.7.5 Compare Fractions											,	(1	√									
3.7.6 Find Fractions on a Number Line											~	√	,		~	,									
3.7.7 Compare Fractions on a Number Line						I			L				√			√									

*This lesson also addresses M.3.12

M						Grad	e 4	Wes	st Vir	ginia	Colleg	ge- and	d Car	eer-R	eadi	ness	Stan	dards	5			
	AW REDBIRD Incation MATHEMATICS		our operat numbers to problems.			eralize place ling for multi numbers.		properties	value unders of operation ti-digit arithn	s to perform	Extend unde fraction equ orde	ivalence and	Buil	d fractions fr under			olying and ex on whole nu		ious		d decimal no and compar fractions.	
No.	Unit/Lesson	M.4.1	M.4.2	M.4.3	M.4.6	M.4.7	M.4.8	M.4.9	M.4.10	M.4.11	M.4.12	M.4.13	M.4.14a	M.4.14b	M.4.14c	M.4.14d	M.4.15a	M.4.15b	M.4.15c	M.4.16	M.4.17	M.4.18
4.1.0	Foundations in Base Ten																					
4.1.1	Read and Write Multi-Digit Numbers					√																
4.1.2	Place Value Relationships				✓	√																
4.1.3	Compare Numbers					√																
4.1.4	Round Numbers						√															
4.1.5	Addition							\checkmark														
4.1.6	Subtraction							√														
4.1.7	Problem Solving with Addition and Subtraction			√				√														
4.2.0	Multiplication and Division																					
4.2.1	Multiplication as Comparison	\checkmark	\checkmark																			
4.2.2	Tape Diagrams and Multiplicative Comparison	\checkmark	\checkmark																			
4.2.3	Find Missing Factors		\checkmark																			
4.2.4	Factors and Multiples*																					
4.2.5	Investigate Remainders			✓																		
	Extend Multiplication Concepts																					
	Multiply by 10, 100, and 1000								✓ ✓													
4.3.2	Estimate Products								1													
4.3.3	Use Area Diagram to Multiply by 1-Digit Number								✓ ✓													
4.3.4	Use Distributive Property to Multiply by 1-Digit Number								✓ ✓													
4.3.5	Use Area Diagram to Multiply by 2-Digit Number																					
4.3.6	Use Distributive Property to Multiply by 2-Digit Number			1																		
4.3.7 4.4.0	Problem Solving with Multiplication Extend Division Concepts			v					V													
4.4.1	Divide 10s, 100s, and 1000s									1			_			_			_			
4.4.1	Estimate Quotients									v ✓												
4.4.3	Area Diagrams in Division																					
4.4.4	Distributive Property in Division									v √												
4.4.5	Zeros in Division									· ✓												
4.4.6	Problem Solving with 1-Digit Divisors			1						√												
4.4.7	Problem Solving with Division and Other Operations									✓												
4.5.0	Equivalent Fractions																					
	Fractions: Compare Whole Numbers to Make New Numb	pers										√										
4.5.2	Compare Fractions with Models											~										
4.5.3	Compare and Order Fractions											√										
4.5.4	Multiply to Create Equivalent Fractions										√											
4.5.5	Divide to Create Equivalent Fractions										~											
4.6.0	Operations with Fractions																					
4.6.1	Add Unit Fractions												√	√								
4.6.2	Add Fractions												√	√								
4.6.3	Subtract Fractions												√	√]	
4.6.4	Mixed Numbers													√	~							
4.6.5	Improper Fractions													✓								
4.6.6	Problem Solving with Fractions with Like Denominators												√			√						
4.6.7	Multiples of Unit Fractions																✓	√				
4.6.8	Multiply a Fraction by a Whole Number																	√	√			
4.6.9	Problem Solving with Fractions and Mixed Operations															√			√			
4.7.0	Decimal Fraction Concepts																					
4.7.1	Decimal Fractions																			✓ ✓		
4.7.2	Add Decimal Fractions																			✓		
	Write Fractions in Decimal Notation																				✓	1
4.7.4	Compare Decimals in Tenths and Hundredths																					√

*This lesson addresses M.4.4

							Gra	ide 5	W	est \	Virgi	nia C	olleg	e- an	d Ca	reer	Read	lines	s Sta	ndaro	ds						
REDBIRD HILL Education MATHEMATICS		Understar	id the place v	value system.		whole nur	perations wit nbers and wi to hundredth	th decimals	fractio strategy t	uivalent ns as a o add and fractions.	Apply an	d extend prev	vious unders	standings of	multiplicatio	on and divis	sion to multip	bly and divid	e fractions.	Geometri			tand concep ation and to	ts of volume a	ind relate	Graph poin coordinate solve real- mathen probl	e plane to world and natical
No. Unit/Lesson	M.5.4	M.5.5	M.5.6a	M.5.6b	M.5.7	M.5.8	M.5.9	M.5.10	M.5.11	M.5.12	M.5.13	M.5.14a	M.5.14b	M.5.15a	M.5.15b	M.5.16	M.5.17a	M.5.17b	M.5.17c	M.5.20a	M.5.20b	M.5.21	M.5.22a	M.5.22b	M.5.22c	M.5.23	M.5.24
5.1.0 Whole Numbers: Place Value & Multiplication																											
5.1.1 Place Value and Exponents	~	1																									
5.1.2 Multiply by 1-Digit Factors	•	- ·				1																					
5.1.3 Multiply by 2-Digit Factors				-		V V																					
5.1.4 Use Algorithms with 1-Digit Factors				+		Î Î																					
											-																
5.1.5 Use Algorithms with 2-Digit Factors																											
5.2.0 Whole Numbers: Division				-																							
5.2.1 Use Multiplication to Estimate Quotients							1																				
5.2.2 Use Rounding to Estimate Quotients				_			1																				
5.2.3 Use Repeated Subtraction and Multiples of 10							~																				
5.2.4 Use Models with 2-Digit Divisors							√																				
5.2.5 Methods for Division							~																				
5.2.6 Problem Solving with Division							√																				
5.3.0 Decimals: Place Value and Operations																											
5.3.1 Decimal Place Value	~		√																								
5.3.2 Round Decimals					1																						
5.3.3 Compare Decimals				1																							
5.3.4 Add and Subtract Decimals								1																			
5.3.5 Multiply and Divide Tenths and Hundredths								· ·																			
5.3.6 Multiply Decimals								, i																			
5.3.7 Divide Decimals		1						1																			
5.3.8 Problem Solving with Decimal Operations		- v		-																							
5.4.0 Fractions: Addition and Subtraction								v																	_		
5.4.1 Equivalent Forms				-					1																		
							-		✓ ✓																		
5.4.2 Find Common Denominators Using Models									-																		
5.4.3 Find Common Denominators									✓ ✓																		
5.4.4 Add and Subtract Fractions and Mixed Numbers Using N	lodels								✓ ✓	1																	
5.4.5 Add and Subtract Fractions and Mixed Numbers									√	1																	
5.4.6 Estimate Sums and Differences										√																	
5.4.7 Problem Solving with Addition and Subtraction of Fraction	ons									~																	
5.5.0 Fractions: Multiplication and Division																											
5.5.1 Inverse Operations											√	√															
5.5.2 Multiply Fractions Using Bar Models												✓															
5.5.3 Multiply Fractions Using a Number Line												✓															
5.5.4 Multiply Fractions Using an Area Diagram												<	~	~		✓											
5.5.5 Scale														~	√	√											
5.5.6 Divide Whole Numbers by Unit Fractions																		~	√								
5.5.7 Divide Unit Fractions by Whole Numbers																	1		√								
5.5.8 Problem Solving with Multiplication and Division of Frac	tions															1			√								
5.6.0 Volume: Right Rectangular Prisms																											
5.6.1 Unit Cubes																				√	√						
5.6.2 Determine Volume Using Cubes																				•	1	1					
5.6.3 Examine Layers, Rows, and Columns																					v		1				
5.6.4 Explore Nets				-			+																✓ ✓				
5.6.4 Explore Nets 5.6.5 Volume Formulas											-												~	1			
				-							<u> </u>														,		
5.6.6 Problem Solving with Volume																								√	~		
5.7.0 Coordinate Graphs																											
5.7.1 Coordinate Plane				-			 				—	 				I										1	
5.7.2 Ordered Pairs											L															1	
5.7.3 Connect Points in the Plane							I				L																√
5.7.4 Use the Coordinate Plane																											\checkmark

								ade	6 V	Vest V	Virgiı	nia Co	ollege	e- an	d Car	eer-F	Read	ines	s Sta	ndar	ds						
Mc Graw Hill Education REDBIRD MATHEMATICS	Unders	tand ratio c		nd use ratio	o reasoning t	to solve	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	A	pply and ext	end previous	s understan	dings of nun	ibers to the s	system of rat	tional numbe	ers.	Apply		previous un algebraic ex		gs of arithr	netic to			I solve one		Represent and analyze quantitative relationships between dependent and independent variables.
No. Unit/Lesson	M.6.1	M.6.2			M.6.3c	M.6.3d	M.6.4	M.6.8		M.6.9b			M.6.10b				M.6.12		M.6.13b		M.6.14	M.6.15	M.6.16	M.6.17	M.6.18	M.6.19	M.6.20
6.1.0 Rational Numbers and Absolute Value																											
6.1.1 Explore Integers								√	√																		
6.1.2 Rational Numbers											√																
6.1.3 Compare and Order Rational Numbers												1	1														
6.1.4 Understand Absolute Value														1	√												
6.1.5 Problem Solving with Absolute Value														1	✓												
6.2.0 Rational Numbers in the Coordinate Plane																											
6.2.1 Graphs on the Coordinate Plane										✓	~																
6.2.2 Distance in the Coordinate Plane																1											
6.2.3 Reflections on the Coordinate Plane										1																	
6.2.4 Problem Solving with the Coordinate Plane*																1											
6.3.0 Division of Fractions																											
6.3.1 Model Division with Unit Fractions							√																				
6.3.2 Model Fraction Division							1																				
6.3.3 Write Fraction Division Equations							1																				
6.3.4 Fraction Division with Equations							1																				
6.3.5 Create, Model, and Solve Problems with Fraction Division							1																				
6.3.6 Problem Solving with Fractions and Mixed Numbers							1																				
6.4.0 Ratios and Rates																											
6.4.1 Visualize and Represent Ratios	1																										
6.4.2 Compare Ratios	•		1																								
6.4.3 Unit Rates		√		1																							
6.4.4 Graph Rates and Other Ratios			1	1																							
6.4.5 Convert Measurement Units			<u> </u>			~																					
6.4.6 Problem Solving with Unit Rates		1	1	1		· ·						<u> </u>				<u> </u>											
6.5.0 Proportions and Proportional Reasoning		v	· ·			•																					
6.5.1 Write Proportions			1									<u> </u>				<u> </u>								-			
6.5.2 Strategies to Solve Proportions						1																					
6.5.3 Percents					1	•																					
6.5.4 Solve Percent Problems					✓ ✓																						
6.5.5 Problem Solving with Proportions			1	1	✓ ✓	1																					
6.6.0 Algebraic Reasoning: Write and Evaluate Expressions			- V	v	- V	~						-															
6.6.1 Introduction to Exponents								_								_	√						_				
6.6.2 Order of Operations																		1		1							
6.6.3 Numerical Expressions																	L V		-	✓ ✓	-	-					
6.6.4 Transition to Algebraic Expressions																			1	 ✓		-					
6.6.5 Read and Write Algebraic Expressions Part 1																		✓ ✓	✓ ✓	- *							
6.6.6 Read and Write Algebraic Expressions Part 1																		V V	L V	1							
6.6.7 Equivalent Expressions																		L V	-	- *	1	1					
6.6.8 Use Equivalent Expressions to Simplify																					↓ v	↓ ✓					
6.6.9 Problem Solving with Algebraic Expressions																	-	1		1	 	✓ ✓					
6.7.0 Equations and Inequalities																		v		- V	v	× ·					
6.7.1 Check for Solutions to Equations																							1				
6.7.2 Write 1-Variable Equations																							V	1			
6.7.3 Solve 1-Variable Equations 6.7.3 Solve 1-Variable Equations																								✓ ✓	1		
																								~			
6.7.4 Problem Solving with 1-Variable Equations 6.7.5 Represent 2-Variable Relationships																									V		1
													-														
6.7.6 Analyze Relationships Using Tables and Graphs													-			-				I		<u> </u>					
6.7.7 Relate Tables and Graphs to Equations																						<u> </u>				\vdash	~
6.7.8 Write Inequalities																					<u> </u>	<u> </u>	✓			1	
6.7.9 Solutions of Inequalities																										√	

*This lesson also addresses M.6.23



Grade 7 -- West Virginia College- and Career-Readiness Standards

Graw REDBIRD							-		,		0									
Hill Education MATHEMATICS	Analyze		al relations and mathe		se them to s oblems.	olve real-	Apply an	d extend pre	evious under		f operations rational nun		ns to add, si	ıbtract, multi	iply, and	operations	perties of to generate expressions.	using r	e and mathema numerical and a essions and equ	algebraic
No. Unit/Lesson	M.7.1	M.7.2a	M.7.2b	M.7.2c	M.7.2d	M.7.3	M.7.4a	M.7.4b	M.7.4c	M.7.4d	M.7.5a	M.7.5b	M.7.5c	M.7.5d	M.7.6	M.7.7	M.7.8	M.7.9	M.7.10a	M.7.10b
7.1.0 Operations with Integers																				
7.1.1 Add and Subtract Integers on the Number Line								√	√											
7.1.2 Add and Subtract Integers							✓	✓	√	✓										
7.1.3 Multiply Integers on the Number Line											√		√							
7.1.4 Multiply Integers											√		√							
7.1.5 Multiply and Divide Integers												√	√							
7.1.6 Problem Solving with Integers										√			√					✓		
7.2.0 Operations with Rational Numbers																				
7.2.1 Add, Subtract, and Multiply Rational Numbers								✓	√		✓									
7.2.2 Operations with Rational Numbers										√			√		✓					
7.2.3 Multiply and Divide Rational Numbers												✓	√							
7.2.4 Fractions as Division												✓	√							
7.2.5 Numerical Expressions with Rational Numbers															√			√		
7.2.6 Decimals and Fractions														√						
7.2.7 Problem Solving with Rational Numbers															√			√		
7.3.0 Unit Rates and Proportional Reasoning																				
7.3.1 Find and Compare Unit Rates	√																			
7.3.2 Identify Proportional Relationships from Tables and Gra	phs	✓																		
7.3.3 Proportional Relationships in Tables and Graphs			✓		✓															
7.3.4 Tables, Graphs, and Equations of Proportional Relations	hips		√	√																
7.3.5 Scale Drawings*			√			\checkmark														
7.3.6 Represent Proportional Relationships			√																	
7.3.7 Problem Solving with Unit Rates and Constant of Propor	tionality					√												✓		
7.4.0 Proportional Reasoning and Percents																				
7.4.1 Represent and Solve Proportions						√														
7.4.2 Proportional Relationships and Percents						√														
7.4.3 Proportional Relationships and Percent Change						√														
7.4.4 Problem Solving with Percent Change						✓												✓		
7.4.5 Problem Solving with Proportional Relationships						√												√		
7.5.0 Algebraic Expressions																				
7.5.1 Add and Subtract Linear Expressions																√				
7.5.2 Expand Linear Expressions																√				
7.5.3 Expand and Factor Linear Expressions																√				
7.5.4 Analyze Equivalent Expressions																	√			
7.5.5 Simplify Multi-Step Expressions																√		√		
7.6.0 Write and Solve Equations and Inequalities																				
7.6.1 One-Step Equations with Rational Numbers																			√	
7.6.2 Write Multi-Step Equations to Model Problems																		✓	✓	1
7.6.3 Solve Multi-Step Equations																		√	√	<u> </u>
7.6.4 Problem Solving with Equations																		✓	✓	1
7.6.5 Write Inequalities to Model Problems																				√
7.6.6 Write and Solve Inequalities Part 1																				√
7.6.7 Write and Solve Inequalities Part 2																				√
7.6.8 Problem Solving with Inequalities																		√		✓
7.7.0 Equations in Measurement and Geometry																				
7.7.1 Circumference of a Circle**																				<u> </u>
7.7.2 Area and Circumference of a Circle***		√																		1
7.7.3 Problem Solving with Circles****																		√	√	<u> </u>
7.7.4 Area and Surface Area of 2- and 3-Dimensional Objects*																			✓	<u> </u>
7.7.5 Surface Area and Volume of 3-Dimensional Objects****																			√	
7.7.6 Problem Solving with 2- and 3-Dimensional Objects****																		✓	✓	

*This lesson also addresses M.7.11

**This lesson addresses M.7.14

***This lesson also addresses M.7.14 and M.7.16

****This lesson also addresses M.7.16