

**Becker School District Curriculum Alignment to
Minnesota K-12 Academic Standards in Mathematics (2007)**

	Strand	Standard	No.	Benchmark	Curriculum	Assessment
5	Number & Operation MCA 18-22 ITEMS	Divide multi-digit numbers; solve real-world and mathematical problems using arithmetic. MCA 4-6 ITEMS	5.1.1.1	Divide multi-digit numbers, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms. Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal. <i>For example:</i> Dividing 153 by 7 can be used to convert the improper fraction to the mixed number.	Everyday Math - Unit 4: Lessons 4.1, 4.2, 4.4, 4.5, 4.6 *4.2, 4.4 teach using traditional method, not partial quotient	Unit 4 progress check
			5.1.1.2	Consider the context in which a problem is situated to select the most useful form of the quotient for the solution and use the context to interpret the quotient appropriately. <i>For example:</i> If 77 amusement ride tickets are to be distributed equally among 4 children, each child will receive 19 tickets, and there will be one left over. If \$77 is to be distributed equally among 4 children, each will receive \$19.25, with nothing left over.	Everyday Math - Unit 4: Lesson 4.6	Unit 4 Assessments
			5.1.1.3	Estimate solutions to arithmetic problems in order to assess the reasonableness of results.	Everyday Math - Unit 2: Lessons 2.1, 2.2, 2.5, 2.7, 2.8, 2.9 *2.8, 2.9 teach using traditional method, not partial products or lattice method	Unit 2 Assessments

5	Number & Operation	Divide multi-digit numbers; solve real-world and mathematical problems using arithmetic.	5.1.1.4	<p>Solve real-world and mathematical problems requiring addition, subtraction, multiplication and division of multi-digit whole numbers. Use various strategies, including the inverse relationships between operations, the use of technology, and the context of the problem to assess the reasonableness of results.</p> <p><i>For example:</i> The calculation $117 \div 9 = 13$ can be checked by multiplying 9 and 13.</p>	<p>Everyday Math - Unit 2: Lessons 2.1, 2.2, 2.4, 2.6, 2.10</p> <p>Everyday Math - Units 1-12 American Tour lessons</p>	Unit Assessments
		<p>Read, write, represent and compare fractions and decimals; recognize and write equivalent fractions; convert between fractions and decimals; use fractions and decimals in real-world and mathematical situations.</p> <p>MCA 6-8 ITEMS</p>	5.1.2.1	<p>Read and write decimals using place value to describe decimals in terms of groups from millionths to millions.</p> <p><i>For example:</i> Possible names for the number 0.0037 are:</p> <p>37 ten thousandths 3 thousandths + 7 ten thousandths;</p> <p>a possible name for the number 1.5 is 15 tenths.</p>	<p>Everyday Math - Unit 2: Lesson 2.10</p> <p>Everyday Math - Unit 5: Lessons 5.5, 5.6, 5.7</p> <p>Everyday Math - Unit 7: Lessons 7.1, 7.2, 7.3</p>	Unit Assessments
			5.1.2.2	<p>Find 0.1 more than a number and 0.1 less than a number. Find 0.01 more than a number and 0.01 less than a number. Find 0.001 more than a number and 0.001 less than a number.</p>	<p>Everyday Math - Unit 5: Lessons 5.5, 5.6, 5.7</p>	Unit 5 Assessments

			5.1.2.3	Order fractions and decimals, including mixed numbers and improper fractions, and locate on a number line. <i>For example:</i> Which is larger 1.25 or ? <i>Another example:</i> In order to work properly, a part must fit through a 0.24 inch wide space. If a part is inch wide, will it fit?	Everyday Math - Unit 5: Lesson 5.3 Everyday Math - Unit 8: Lesson 8.1	Unit Assessments
5	Number & Operation	Read, write, represent and compare fractions and decimals; recognize and write equivalent fractions; convert between fractions and decimals; use fractions and decimals in real-world and mathematical situations.	5.1.2.4	Recognize and generate equivalent decimals, fractions, mixed numbers and improper fractions in various contexts. <i>For example:</i> When comparing 1.5 and, note that $1.5 = \frac{3}{2}$, so $1.5 < \frac{5}{2}$.	Everyday Math - Unit 5: Lessons 5.2-5.8 Everyday Math - Unit 6: Lessons 6.9, 6.10 Everyday Math - Unit 8: Lessons 8.1-8.10	Unit Assessments
			5.1.2.5	Round numbers to the nearest 0.1, 0.01 and 0.001. <i>For example:</i> Fifth grade students used a calculator to find the mean of the monthly allowance in their class. The calculator display shows 25.80645161. Round this number to the nearest cent.	Everyday Math - Unit 5: Lessons 5.5, 5.6, 5.7, 5.8 Everyday Math - Unit 6: Lesson 6.1	Unit Assessments

		Add and subtract fractions, mixed numbers and decimals to solve real-world and mathematical problems. MCA 6-8 ITEMS	5.1.3.1	Add and subtract decimals and fractions, using efficient and generalizable procedures, including standard algorithms.	Everyday Math - Unit 2: Lessons 2.2, 2.3, 2.4 Everyday Math - Unit 6: Lessons 6.8, 6.9, 6.10	Unit Assessments
			5.1.3.2	Model addition and subtraction of fractions and decimals using a variety of representations. <i>For example:</i> Represent and by drawing a rectangle divided into 4 columns and 3 rows and shading the appropriate parts or by using fraction circles or bars.	Everyday Math - Unit 2: Lessons 2.2, 2.3, 2.4 Everyday Math - Unit 6: Lessons 6.8, 6.9, 6.10	Unit Assessments
			5.1.3.3	Estimate sums and differences of decimals and fractions to assess the reasonableness of results. <i>For example:</i> Recognize that is between 8 and 9 (since).	Everyday Math - Unit 2: Lesson 2.2	Unit Assessments
	Algebra		5.2.1.2	Use a rule or table to represent ordered pairs of positive integers and graph these ordered pairs on a coordinate system.	Everyday Math - Unit 9: Lessons 9.2, 9.3 Everyday Math - Unit 10: Lesson 10.4	Unit Assessments
			5.2.1.2	Use a rule or table to represent ordered pairs of positive integers and graph these ordered pairs on a coordinate system.	Everyday Math - Unit 9: Lessons 9.2, 9.3 Everyday Math - Unit 10: Lesson 10.4	Unit Assessments

		Use properties of arithmetic to generate equivalent numerical expressions and evaluate expressions involving whole numbers. MCA 2-3 ITEMS	5.2.2.1	Apply the commutative, associative and distributive properties and order of operations to generate equivalent numerical expressions and to solve problems involving whole numbers. <i>For example:</i> Purchase 5 pencils at 19 cents and 7 erasers at 19 cents. The numerical expression is $5 \times 19 + 7 \times 19$ which is the same as $(5 + 7) \times 19$.	Everyday Math - Unit 7: Lessons 7.4, 7.5, 7.6	Unit Assessments
5	Algebra	Understand and interpret equations and inequalities involving variables and whole numbers, and use them to represent and solve real-world and mathematical problems.	5.2.3.1	Determine whether an equation or inequality involving a variable is true or false for a given value of the variable. <i>For example:</i> Determine whether the inequality $1.5 + x < 10$ is true for $x = 2.8$, $x = 8.1$, or $x = 9.2$.	Study Link 4.7	
		MCA 4-6 ITEMS	5.2.3.2	Represent real-world situations using equations and inequalities involving variables. Create real-world situations corresponding to equations and inequalities. <i>For example:</i> $250 - 27 \times a = b$ can be used to represent the number of sheets of paper remaining from a packet of 250 sheets when each student in a class of 27 is given a certain number of sheets.	Everyday Math - Unit 10: Lesson 10.3, 10.9 Math Boxes 10.7	Unit Assessments

			5.2.3.3	Evaluate expressions and solve equations involving variables when values for the variables are given. <i>For example:</i> Using the formula, $A = \ell w$, determine the area when the length is 5, and the width 6, and find the length when the area is 24 and the width is 4.	Everyday Math - Unit 9: Lesson 9.4, 9.5, 9.8, 9.9, 9.10 Everyday Math - Unit 10: Lessons 10.1, 10.2, 10.3	Unit Assessments
	Geometry and Measurement MCA 8-10 ITEMS	Describe, classify, and draw representations of three-dimensional figures. MCA 3-4 ITEMS	5.3.1.1	Describe and classify three-dimensional figures including cubes, prisms and pyramids by the number of edges, faces or vertices as well as the types of faces.	Everyday Math - Unit 11: Lessons 11.1, 11.2, 11.3	Unit Assessments
			5.3.1.2	Recognize and draw a net for a three-dimensional figure.	Everyday Math - Unit 11: Lesson 11.1	Unit Assessments
5	Geometry & Measurement	Determine the area of triangles and quadrilaterals; determine the surface area and volume of rectangular prisms in various contexts. MCA 5-6 ITEMS	5.3.2.1	Develop and use formulas to determine the area of triangles, parallelograms and figures that can be decomposed into triangles.	Everyday Math - Unit 9: Lesson 9.4, 9.5, 9.6	Unit Assessments
			5.3.2.2	Use various tools and strategies to measure the volume and surface	Everyday Math - Unit 9: Lessons 9.8, 9.9	Unit Assessments

				<p>area of objects that are shaped like rectangular prisms.</p> <p><i>For example:</i> Use a net or decompose the surface into rectangles.</p> <p><i>Another example:</i> Measure the volume of a cereal box by using a ruler to measure its height, width and length, or by filling it with cereal and then emptying the cereal into containers of known volume.</p>	Everyday Math - Unit 11: Lesson 11.7	
			5.3.2.3	<p>Understand that the volume of a three-dimensional figure can be found by counting the total number of cubic units that fill a shape without gaps or overlaps. Use cubic units to label volume measurements.</p> <p><i>For example:</i> Use cubes to find the volume of a small box.</p>	Everyday Math - Unit 9: Lesson 9.8	Unit Assessments
			5.3.2.4	<p>Develop and use the formulas $V = \ell wh$ and $V = Bh$ to determine the volume of rectangular prisms. Justify why base area B and height h are multiplied to find the volume of a rectangular prism by breaking the prism into layers of unit cubes.</p>	Everyday Math - Unit 9: Lessons 9.8, 9.9, 9.10	Unit Assessments

5	Data Analysis MCA 6-8 ITEMS	Display and interpret data; determine mean, median and range.	5.4.1.1	<p>Know and use the definitions of the mean, median and range of a set of data. Know how to use a spreadsheet to find the mean, median and range of a data set. Understand that the mean is a "leveling out" of data.</p> <p><i>For example:</i> The set of numbers 1, 1, 4, 6 has mean 3. It can be leveled by taking one unit from the 4 and three units from the 6 and adding them to the 1s, making four 3s.</p>	Everyday Math - Unit 2: Lesson 2.5 Everyday Math - Unit 6: Lessons 6.1, 6.3, 6.4, 6.5, 6.6	Unit Assessments
			5.4.1.2	<p>Create and analyze double-bar graphs and line graphs by applying understanding of whole numbers, fractions and decimals. Know how to create spreadsheet tables and graphs to display data.</p>	Study link 7.6 Math master 8.7 Everyday Math - Unit 10: Lessons 10.6, 10.7 Everyday Math - Unit 12: Lesson 12.7	Unit Assessments

Language Arts

Foundational Skills in Reading

Word Study

- Know and apply grade-level phonics and word analysis in decoding multi-syllabic words
- Use knowledge of syllabication, patterns, and prefixes (sub, mono, bi, inter, super, anti) and suffixes (tion, sion, el/al/ol/il) to decode words

Fluency

- Read grade level texts with accuracy and appropriate pace - 130 words correct per minute/99% accuracy
- Use context to confirm or self-correct word recognition, rereading as necessary

Literature: Comprehension

- Draw inferences from text using specific evidence
- Determine theme - specific focus on change/growth in life, survival, personal belief/fantasy, and relationships
- Determine the meaning of words and phrases in a text including figurative language, specifically oxymoron, hyperbole, clichés, assonance, and consonance
- Assess how point of view and author's purpose shapes a text

Informational Text: Comprehension

- Draw inferences from text using specific evidence
- Analyze multiple accounts by various cultures of the same event or topic, noting important similarities and differences in the point-of-view they represent
- Compare and contrast the structure in two or more informational texts (compare & contrast, problem/solution, cause & effect, sequencing, list)
- Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence

Writing

- Write well-organized narrative texts using effective techniques including descriptive language, dialogue, well-developed sensory details, effective transitions, and a closing paragraph
- Write well-supported and logically organized opinion pieces supported by information from an outside source with an appropriate conclusion
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly
- Conduct short research projects using several sources to build knowledge through investigation of different aspects of a topic. Research, take notes, summarize, and cite sources

Visual Arts

- Describe the characteristics of the elements of visual art including color, line, shape, value, form, texture and space
- Describe how the principles of visual art such as repetition, pattern, emphasis, contrast and balance are used in the creation, presentation or response to visual artworks
- Identify characteristics of Western and non-Western styles, movements and genres in art
- Describe the tools, materials and techniques used in a variety of two- and three-dimensional media such as drawing, printmaking, ceramics or sculpture
- Describe the personal, social, cultural, or historical contexts that influence the creation of visual artworks including the contributions of Minnesota American Indian tribes and communities
- Describe how visual art communicates meaning
- Create original two-and-three-dimensional artworks to express specific artistic ideas
- Revise artworks based on the feedback of others and self-reflection
- Select and assemble artworks for a personal portfolio
- Revise a presentation based on the feedback of others and self-reflection
- Justify personal interpretations and reactions to works of visual art

Music

- Use the elements of music including melody, rhythm, harmony, dynamics and tempo
- Read and notate music
- Sing and play alone and in an ensemble setting
- Sing and play music of a variety of cultures and styles
- Improvise and compose rhythms and melodies
- Identify how music communicates meaning

The Becker School District Fifth Grade Curriculum is based on Minnesota State Academic Standards and designed to provide developmentally appropriate readiness for Sixth Grade. Student progress on these outcomes is reported on the grade level report card. If you have questions please contact Jean Duffy, Director of Curriculum and Instruction: jduffy@becker.k12.mn.us, Christine Glomski, Building Principal: cglomski@becker.k12.mn.us, or your child's classroom teacher.

Parent Resources:

Becker School District Literacy Hub
<http://isd726literacyhub.weebly.com/>

updated 8/1/2013

Becker Public Schools



*Preparing Self-Directed Learners
to Thrive in a
Changing Global Community*

Grade 5 Essential Outcomes



ISD No. 726
Office of Curriculum and Instruction
Becker, Minnesota

Mathematics

Numbers and Operations

- Divide multi-digit numbers using standard algorithms
- Recognize, interpret, and use quotients appropriately
- Solve real world and mathematical problems using various strategies - requiring addition, subtraction, multiplication and division of multi-digit whole numbers fractions and decimals; use various strategies including the inverse relationship between operations, the use of technology, and the context of the problem to assess the reasonableness of results
- Recognize and generate equivalent decimals, fractions, mixed numbers and improper fractions in a various contexts

Algebra

- Use a rule or table to represent and graph ordered pairs of positive integers include introductory negative (four quadrants), X/Y in 'What's My Rule' and writing entire expressions
- Apply the commutative, associative and distributive properties and order of operations to generate equivalent numerical expressions and to solve problems involving whole numbers

Geometry and Measurement

- Describe, classify and sketch triangles - equilateral and right
- Develop and use formulas to determine the area of triangles, and parallelograms and figures that can be decomposed into triangles
- Use various tools and strategies to measure the volume and surface area of objects that are shaped like rectangular prisms
- Develop and use the formulas $V=lwh$ and $V=Bh$ to determine the volume of rectangular prisms

Data Analysis & Probability

- Know and use statistical landmarks of a set of data (mean, median, range)
- Create a variety of graphs to display data (include spreadsheet and tables)
- Analyze a variety of graphs to identify relationships and trends, and make predictions double-bar graphs and line graphs by applying understanding of whole numbers, fractions, and decimals



Science

The Nature of Science and Engineering: Variables

- Generate a scientific question and plan an appropriate scientific investigation
- Identify and collect evidence
- Identify the variables in an investigation
- Use appropriate tools and techniques to gather, analyze, and interpret data
- Recognizing measurement errors, equipment failures, or uncontrolled variables can influence data negatively, leading students to replicate the investigation in order to increase the validity of data collected

Physical Science: Simple Machines

- Identify simple machines
- Demonstrate how each machine changes the input and output of forces and motions
- Identify the force that starts something moving or changes its speed
- Demonstrate that a greater force produces a greater change in motion

Earth Science: Landforms

- Explain how slow and fast processes form features of the Earth's surface

Life Science: Environments

- Describe how plant and animal structures and functions aid survival
- Identify relationships between living and non-living parts and how environmental factors affect both
- Explain the changes to a system if one of its parts changed

Physical Education

- Comprehend mature levels of positive feelings towards one's self and respect and tolerance for those individuals who are less gifted
- Demonstrate good sportsmanship
- Apply physical education to life situations
- Exhibit and apply the knowledge and skills, which make students better at group and team sports
- Understand how to increase muscular strength, endurance, flexibility, body awareness, and agility through fitness and recreational activities

Social Studies

Citizenship & Government

- Understand how to be an informed and engaged citizen
- Explain how the U.S. Constitution and Bill of Rights shape the U.S. government

Economics

- Understand the principles of personal finance: saving, borrowing, taxes, spending, and budgeting
- Explain how to consider short-term and long-term costs/benefits when making economic decisions

US History

- Understand and analyze the causes and outcomes of historical events, create a timeline
- Describe the effects of European exploration and settlement in America on Indigenous people
- Identify the causes of the American Revolution and major events in this time period culminating in the creation of a new nation

Geography

- Create and analyze different types of maps

Media

Inquiry, Research, and Problem Solving

- Demonstrate the ability to apply the Big 6 information literacy process for questioning, gathering, synthesizing, and evaluating information individually and collaboratively

Expanding Literacies

- Demonstrate the ability to independently use electronic tools for locating print and electronic materials to be used for uses including--research, personal growth, exploration and reading for pleasure

Technology Use and Concepts

- Perform basic operations of computer and network use independently and collaboratively while adapting strategies to different platforms

Ethical Participation in a Global Society

- Regularly demonstrate the ability to use facilities and equipment respectfully and independently



Student: [REDACTED]
5th Grade



Becker Intermediate School
2013 - 2014

Grade Mark Legend

S Satisfactory
N Needs Improvement
E Exceeds Standards
M Meets Standards
P Partially Meets Standards
DN Does Not Meet Standards

Class : **Fifth Grade**

Teacher: [REDACTED]

Class : **PHYSICAL EDUCATION**

Teacher: [REDACTED]

Language Arts

Foundational Skills in Reading	
Comprehension: Literature	
Comprehension: Informational Text	
Writing	

Physical Education

Skill/Fitness Development	
Effort of Participation	
Cooperation & Responsible Personal Behavior	

Math

Numbers & Operations	
Algebra	
Geometry & Measurement	
Data Analysis & Probability	

Social Studies

Social Studies	
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Science

Science	
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Citizenship/Work Habits

RESPECT - Self, Others and Property	
OWNERSHIP - Work Completion and Organization	
CITIZENSHIP - Follows Directions and Uses time wisely	
KINDNESS - Helpful, Polite and Patient	

Number of Lates

Number of Lates	
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Class : **ART 5**

Teacher: [REDACTED]

Art

Skill Development	
Participation	

Class : **MEDIA**

Teacher: [REDACTED]

Technology/Media Skills

Skill Development	
Participation	

Class : **MUSIC 5**

Teacher: [REDACTED]

Music

Skill Development	
Participation	

BECKER MCA RESULTS 2012 AND 2013

Becker MMR Ranking vs MN Schools	2012	2013
Intermediate School		
Rank	571 of 902	238 of 914
Percentile	37	74
Middle School		
Rank	12 of 225	2 of 225
Percentile	95	99
High School		
Rank	305 of 477	153 of 466
Percentile	36	67