Mason City Community Schools
Summer Math Activities
For Students Entering Grade 3

You have learned so much in MATH this year in second grade, and we want you to continue practicing those skills over the summer! Here are many fun math activities that will help you practice your math skills and get you ready for third grade. In this packet you will find a chart of activities for June, July and August. Once an activity has been completed a parent or guardian should write his/her initials in the box. Activities are to be done in a math journal. Please use a new page for each activity (use both sides) and put the month, and the number of the activity at the top of the page. In this document, there is also a list of books you can find at the library that are great math thinking stories, and websites appropriate for your grade. Don't forget to bring your journal, June, July and August initialed chart, and your "Places I Visited on my Summer Vacation" tally sheet to school on the first day of third grade. Your new teacher will be so proud of your summer math work. Your new teacher will be so proud of your summer math work!

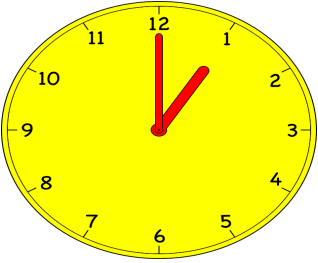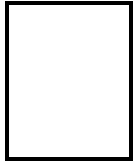**Math Journal: Create a personal and fun Math Journal by stapling several pieces of paper together or use a spiral notebook or binder with paper. Be creative and decorate the cover with markers or crayons or other materials to show math in your world.**

Have a safe and happy summer, and Happy Thinking!

June, July, and August!
(Parents, please remember to initial completed activities.)

Number and Operations	#1 Play "Guess my Number" on the 200 chart. (directions and chart attached)	#2 Play "Plus 9 or 10 BINGO". (directions and gameboard attached)	#3 Start at 32. Add 40. Subtract 25. Add 15. What number am I? Write the problem and answer in your math journal.	#4 Start at 175. Subtract 50. Add 19. Subtract 100. What number am I? Write the problem and answer in your journal.	
Place Value	#5 Use the digits 3, 4, and 9 to write the largest 3 digit number that you can in your journal. Circle the digit in the 10's place.	#6 Use the digits 2, 7 and 8. Write the smallest 3 digit number that you can. Draw the place value blocks that represent each number.	#7 Use expanded notation to make the following numbers: 34, 47, 61, 129, 385 and 706. For Example: 124 = 100 + 20 +4		#8 Add 74+18 using addition strategies.
Money		#9 Play "Guess my Number" on the 200 chart.	#10 Play "Plus 9 or 10 BINGO".	#11 Explain a strategy to find this difference: 62 – 27.	#12 A toy costs 65 cents. Meg buys 1 toy and gets back a dime in change. Meg paid for the toy with 3 coins. What were they? *Show the coins in your journal.*
Facts	#13 Take the addition fluency assessment. at this site: http://www.multiplication.com/resources/addition-self-correcting-quizzes Make flashcards for the incorrect problems.	#14 Write the 5's and 6's addition facts, from 5 + 0 to 5 + 10 and 6 + 0 to 6 + 10.		#15 Practice your addition facts with someone or online. Online fact fluency practice: http://www.multiplication.com/resources/addition-self-correcting-quizzes	#16 Do these problems in your journal. 123 + 245 908 + 332 197 + 601

Facts	#17 Take the subtraction fluency assessment. At this site: http://www.multiplication.com/resources/subtraction-self-correcting-quizzes Make flashcards for the problems that are incorrect.	#18 Do these problems in your journal. 65 - 54 98 - 77 73 - 65	#19 Practice your subtraction facts with someone or online. Online fact fluency practice: http://www.multiplication.com/resources/addition-self-correcting-quizzes http://oswego.org/ocsd-web/games/mathmagician/maths1.html	#20 Write 3 or 4 subtraction problems for some else to do. Check them, if they're correct, put a star. If they are wrong, show the correct answer.	
Time		#21 If it is 2:15 p.m., what time will it be in 30 minutes? Is it morning, or afternoon? How do you know?	#22 In your journal draw 3 round clocks showing 3 things you did at specific times today. Tell what those activities were. Be sure to use both analog and digital times	#23 What time is it on this clock?	# 24 What time is it on this clock?
Fractions	#25 Draw a rectangle, divide it into 3 equal parts, shade in ⅔.	#26 Draw a rectangle in your journal and shade ¾ of it.	#27 Draw 10 small circles in your journal. Color 6/10 of the circles. Then, put happy faces on ½ of the colored circles. What fraction have happy faces?	#28 Divide this square into eighths, then shade 5/8	

Problem Solving	#29 Write a summer story problem for this number sentence. 13 + 24 = __		#30 You have 12 marbles, you give 4 to Jon, and 6 to May. Your dad buys you 10 marbles. How many marbles do you have now? Explain.	#31 Write a story problem for this number sentence. 49 – 23 =__	#32 A zoo had 79 animals. They got 12 more, but then gave 15 to another zoo. How many do they have now. Show all your work.

PLACES I VISITED ON MY SUMMER VACATION

Places	Tallies
Library	
Beach	
Zoo	
Museum	
Pool	
Playground	
Other	

Suggested Math Books for Third Graders

TITLE	AUTHOR	STRAND/TOPIC
Fraction Fun	Adler, David A.	Fractions
Who Sank the Boat?	Allen, Pamela	Reference Frames
Anno's Mysterious Multiplying Jar	Anno, Massaichiro and Mitsumasa Anno	Number Stories and Operations
Lao Lao of Dragon Mountain	Bateson-Hill, Margaret	Geometry
Opt: An Illusionary Tale	Baum, Arlene and Joseph	Geometry
The King's Chessboard	Birch, David	Number Stories and Operations
The I Hate Mathematics! Book	Burns, Marilyn	Data and Chance
The Greedy Triangle	Burns, Marilyn	Geometry
Counting on Frank	Clement, Rod	Probability
Do You Wanna Bet?	Cushman, Jean	Data and Chance
Pizza Counting	Dobson, Christina	Number Stories and Operations
Ed Emberley's Picture Pie: A Book of Circle Art	Emberley, Ed	Fractions
Each Orange Had Eight Slices: A Counting Book	Giganti, Paul	Number Patterns and Counting
A Fly on the Ceiling: A Math Myth	Glass, Julie	Reference Frames

Cubes, Cones, Cylinders, and Spheres	Hoban, Tana	Geometry
Sea Squares	Hulme, Joy N.	Number Patterns and Counting
The Doorbell Rang	Hutchins, Pat	Number Stories and Operations
Measuring Penny	Leedy, Loreen	Measurement
Gator Pie	Matthews, Louise	Fractions
A Million Fish…More or Less	McKissack, Patricia C.	Data and Chance
Eating Fractions	McMillian, Bruce	Fractions
Anno's Magic Seeds	Mitsumasa, Anno	Number Patterns and Counting
Less Than Zero	Murphy, Stuart J.	Number Patterns and Counting
Probably Pistachio	Murphy, Stuart J.	Data and Chance

Betcha!	Murphy, Stuart J.	Estimation
Give Me Half!	Murphy, Stuart J.	Fractions
How Big Is a Foot?	Myller, Rolf	Measurement
Ranger Rick (magazine)	National Wildlife Federation	Number Patterns and Counting
Sir Cumference and the First Round Table: A Math Adventure	Neuschwander, Cindy	Geometry
Sir Cumference and the Sword in the Cone	Neuschwander, Cindy	Geometry

The World Almanac and Book of Facts 2005	**Park, Ken**	**Number Patterns and Counting**
DK Nature Encyclopedia	**Parker, Steve (ed.)**	**Number Patterns and Counting**
If You Hopped Like a Frog	**Schwartz, David**	**Number Stories and Operations**
Millions to Measure	**Schwartz, David**	**Measurement**
How Much Is a Million?	**Schwartz, David**	**Number Patterns and Counting**
If You Made A Million	**Schwartz, David**	**Number Patterns and Counting**
On Beyond a Million: An Amazing Math Journey	**Schwartz, David**	**Number Patterns and Counting**
Math Curse	**Scieszka, Jon and Lane Smith**	**Number Stories and Operations**
The Simon and Schuster Encyclopedia of Animals: A Visual Who's Who of the World's Creatures	**Simon and Schuster**	**Number Patterns and Counting**
The Art of Shapes: For Children and Adults	**Steele, Margaret and Cindy Estes**	**Geometry**
Math-terpieces	**Tang, Greg**	**Number Stories and Operations**
The Grapes of Math	**Tang, Greg**	**Number Stories and Operations**
The Best of Times	**Tang, Greg**	**Number Stories and Operations**

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

"PLUS 9 OR 10 BINGO"

You need

Deck of Cards (without Face Cards and Wild Cards)

Two kinds of counters (20 per player)

Game board

Play with a partner

1. Player 1 turns over the top card in the deck.

2. Player 1 adds 9 or 10 to that number, and covers the sum on the game board.

3. Player 2 turns over the top card.

4. Player 2 adds 9 or 10 to that number, and covers the sum on the game board.

5. Keep taking turns. If all the possible sums are covered, take another card.

6. The game is over when all of the numbers in one row are covered. The numbers can go across, down, or corner to corner.

More Ways to Play

Play with the Wild Cards. A Wild Card can be any number.

Play to fill more than one row.

Play as a team. Try to fill the entire game board.

"GUESS MY NUMBER ON THE 200 CHART"

You need

200 chart

Play with a partner

1. Player 1 secretly records a number between 1 and 100.

2. Player 2 asks a yes or no question about the number.

3. Player 1 says yes or no. Player 2 keeps track on the 200 chart.

4. Player 2 keeps asking Player 1 yes or no questions about the number.

5. Keep track of the number of questions it takes to guess Player 1's number. Try to guess in as few questions as possible.

6. Take turns being Player 1 and Player 2.
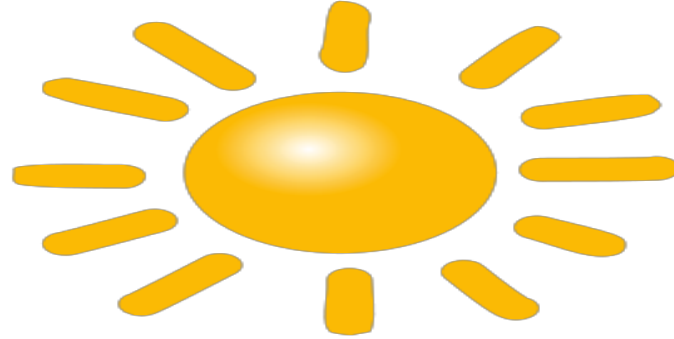
More Ways to Play

Play with a small group.

Play on a number line. Use clothespins to narrow the range of possible numbers.

PLUS 9 or 10 BINGO GAMEBOARD

9	10	11	12	13	14
15	16	17	18	19	20
20	19	18	17	16	15
14	13	12	11	10	9
9	10	11	12	13	14
15	16	17	18	19	20

sunsational websites

Here are some fun and exciting websites to visit over the summer for practice.

At the time that this summer mathematics packet was created, the websites listed were checked by teachers and deemed child appropriate. However, parents should always monitor their child's use of any Internet site.

"A Plus Math" operations games, flashcards for facts practice: http://www.aplusmath.com/Games/index.html

More facts practice: http://www.factmonster.com/math/flashcards.html

"IXL" - skills are organized into categories by grade. http://www.ixl.com/math/grade-3

"MathABC" includes numbers, addition, subtraction, money, time, and miscellaneous. http://www.mathabc.com/math-3rd-grade

"Learning Games for Kids" educational math games. http://www.learninggamesforkids.com/3rd-grade-math.html

"ABCYA" educational games and apps. http://www.abcya.com/third_grade_computers.htm

Third Grade Core Mathematics Vocabulary

1 Acute Angle Any angle that measures between 0º and 90º. (O)

2 Angle A figure formed by two rays or two line segments that meet
at a point.

Note to teachers – be sure to draw angles with different
length rays, as well as angles where neither ray is horizontal.

3 Array An arrangement of objects, pictures, or numbers in columns and rows.

4 Column A vertical group of objects or cells in an array or table.

5 Degree 1. A unit of measure for temperature.

2. A unit of measure for an angle.

6 Denominator The bottom number in a fraction that shows the total number of equal parts in the
whole.

7 Digit Any of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

8 Dividend The number that is divided in division. In 12 ÷ 3, 12 is the dividend.

9 Divisor The number that you divide by in division. In 12 ÷ 3, 3 is the divisor.

10 Edge The line segment where two faces of a solid figure meet.

11 Face A flat surface, or side, of a solid figure.

12 Factor One of two or more numbers that are multiplied together to obtain a product;

factor x factor = product

Example: 4 x 3 = 12, 4 and 3 are factors.

13 Gallon (gal) A customary unit used to measure capacity.

14 Gram (g) A metric unit of mass, about one paper clip.

15 Hexagon A polygon with six sides.

16 Line A straight path that goes on forever in opposite directions.

17 Line Segment A part of a line. A line segment has two endpoints.

18 Liter (L) A metric unit used to measure capacity.

19 Meter (m) A metric unit used to measure length.

20 Mile (mi) A customary unit used to measure length.

edge

21 Multiple Numbers that are products of a given number and whole numbers. Some
multiples of 6 are: 6, 12, 18, 24...

22 Numerator The number above the line in a fraction. The numerator represents how many

pieces of the whole that are discussed.

23 Obtuse Angle An angle that measures more than 90_o but less than 180_o.

24 Ounce (oz) A customary unit used to measure weight. 16 ounces = 1 pound.

25 Parallelogram A quadrilateral (4-sided figure) that has both pairs of opposite sides equal and parallel. Examples: square, rhombus, rectangle.

26 Pentagon A polygon with five sides.

27 Point A single exact location, often represented by a dot.

28 Polygon A closed plane figure with sides made of straight line segments.

29 Pound (lb) A customary unit used to measure weight. 1 pound = 16 ounces.

30 Product the result of a multiplication expression;

factor x factor = product

Example: 3 x 4 = 12, 12 is the product

31 Quadrilateral A polygon (2-dimensional figure) with four sides.

32 Quart (qt) A customary unit used to measure capacity.

33 Quotient The answer when you divide numbers. In 12 ÷ 3 = 4, 4 is the quotient.

34 Ray A part of a line that has one endpoint and goes on forever in one direction.

35 Round(ing) To find about how many or how much by expressing a number to the nearest ten, hundred, thousand, and so on.

36 Row A horizontal group of objects or cells in an array or a table.

37 Right Angle An angle that has exactly $90°$. Example: corner of 8½ x 11 bond paper.

38 Standard Form A number written with one digit for each place value

Example: The standard form for five hundred forty-six is 546.

The standard form for three thousand six is 3,006.

39 Twice Two times as many. For example, 12 is twice as many as 6.

40 Vertex A point where sides, rays, or edges meet.