

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Individual Contest

GENERAL INSTRUCTIONS applying to all tests:

- *Good sportsmanship is expected throughout the competition by all involved. Bad sportsmanship may result in disqualification.*
- *Calculators or any other aids may not be used on any portion of this contest.*
- *Unless stated otherwise:*
 - *For problems dealing with money, a decimal answer should be given.*
 - *Express all rational, non-integer answers as reduced common fractions.*
- *For fifth and sixth grade, all fractions and ratios must be reduced.*
- *Units are not necessary unless it is a problem that deals with time and, in that case, am or pm is needed. However, if you choose to use units, they must be correct.*
- *Leave all answers in terms of π where applicable.*
- *Do not round any answers unless stated otherwise.*
- *Record all answers on the colored cover sheets in the answer column only.*
- *Make sure all answer sheets have all the information filled out at the top of the sheet.*
- *Tests will be scored as a 0 if answers are not recorded correctly on the answer sheets.*
- *Blank answer sheets and answer sheets with no name will also be scored as a 0.*

INDIVIDUAL TEST - 35 minutes

When you are prompted to begin, tear off the colored sheet and begin testing. Make sure your name and school are recorded on the answer sheet. Each problem is scored as a 1 or 0. Record your answers on the score sheet. No talking during the test. You will be given a 5 minute warning.

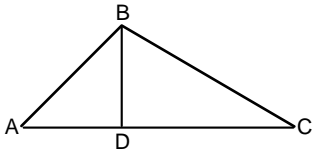
"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Individual Contest

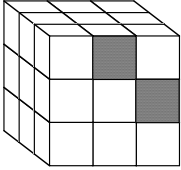
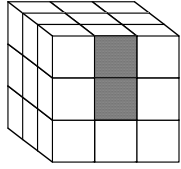
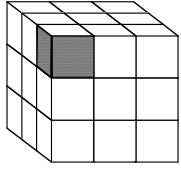
Record all answers on the colored cover sheet.

1	Josh ran 12 yards. How many feet did he run?
2	Write the number that has a 1 in the tens place, an 8 in the thousands place, a zero in the ones place, and a 5 in the hundreds place.
3	How many counting numbers (positive whole numbers, also called natural numbers or positive integers) are bigger than 7 but smaller than 20?
4	What is the value of $1 \times 2 \times 1 \times 2 \times 1$?
5	On a digital clock showing only the hour and the minute, what is the sum of the digits showing at 10 minutes before noon?
6	What value of x makes the following equation true? $12 + 3 + 8 = 1 + 6 + x$
7	Emma has one quarter, three pennies, and two nickels. How many cents does she have? (Note: Answer in <u>cents</u> , not dollars.)
8	What is the largest counting number less than 10000?
9	Barry weighs twice as much as Larry. When Larry stands on the scales holding his 5-kilogram cat Harry, together they weigh 20 kilograms. How many kilograms does Barry weigh?
10	Let $A = 14 - 8$ and $B = 5 \div 5$. What is $A + B$?
11	Only giraffes and ostriches are feeding on a savanna. If there are 30 legs and 8 heads, how many giraffes are on the savanna?
12	Each of 79 boxes has 50 cookies in it. How many cookies are there in all the boxes?
13	How many of the following six values are odd? 714 8887 100 (7×5) $(1+1+1+1)$ $(7-3+7-3)$
14	Evaluate $1.23 + 0.69 - 0.04$, and give your answer as a decimal.
15	Ruthie wanted to add the first 9 counting numbers, but she mistakenly left out one of the numbers. Otherwise, she added correctly, and got a sum of 37. What number did she leave out?
16	What is the median of the following set of 7 values? 18, 77, 43.5, 9, 0.567, $1/2$, 25.4
17	Milly gets paid 25 cents for every newspaper she delivers. How much money, in <u>dollars</u> , will she get paid for delivering 42 newspapers?
18	Find the value of $18 + 18 + 18 + 18 + 18 + 19 + 19 + 19 + 18 + 18$.
19	How many prime numbers are less than 10? (A prime number is a counting number that can be divided without remainder by exactly two numbers, itself and 1.)
20	Anna has four M&Ms (two red, one yellow, and one blue), which are identical except for color. In how many distinct (different) orders can Anna eat her M&Ms if she eats them one by one?
21	When my number is divided by 7, the remainder is 3. When my number is divided by 5, the remainder is 4. Find my number if it is greater than 10 but less than 50.

22	A sponge can soak up 5 times its weight in water. A fully soaked sponge weighs 30 ounces. How many ounces does the sponge weigh when dry?
23	Miya bought some apples at the grocery store. She gave $\frac{1}{2}$ of her apples to John, who then gave $\frac{2}{5}$ of these apples to Henry. Henry got 6 apples from John. How many apples did Miya buy at the store?
24	Two counting numbers, each a multiple of 3, are multiplied together. Give the letters of all of the following statements that must be true of the product. (If none of the statements must be true, answer "none".) A) The product is even. B) The product is odd. C) The product is a multiple of 3. D) The product is a multiple of 6. E) The product is a multiple of 9.
25	Linda has 36 books that are either math books or cookbooks. She has 6 more math books than cookbooks. How many cookbooks does she have?
26	In an arithmetic sequence or addition pattern, you add the same amount to each term to get the next term. The first term of a certain arithmetic sequence is 8 and the third term is 19. What is the seventh term of this sequence?
	
27	Find the number of square inches in the area of triangle ABC, given that AD is 5 inches, BD is 6 inches, and CD is 13 inches. BD forms a right angle with AC.
28	Katie is going to sell lemonade at a lemonade stand. Each pitcher of lemonade requires one and a half lemons and $\frac{2}{3}$ cups of sugar. If she wants to use a whole number of lemons and full cups of sugar, what is the smallest number of pitchers of lemonade Katie could make?
29	When I add one more than my number to five times my number, the sum is 25. What is my number?
30	When a counting number is selected at random from the first 99 counting numbers, what is the probability that it can be divided by 5 with no remainder? Give your answer as a fraction.

Challenge Questions

31	Biff is riding his bike from his house to Eho's house to study math. Biff has ridden 8 miles plus two-thirds of the total distance, and still has 5 miles to go. How many miles is it from Biff's house to Eho's house?
32	Alice and Bertie are skipping rocks across a pond. Alice's rock bounces every 6 inches and Bertie's rock bounces every 8 inches. The pond is 25 feet wide and both rocks make it across, starting and ending at the same time and place. How many times will the 2 rocks be touching the water at the same time?
33	Helen only likes numbers that are multiples of 13, and Ellen only likes numbers whose units digit (ones place digit) is 1. What is the second smallest positive number that Helen and Ellen both like?
34	Randy and Alex are racing bikes around a circular track 800 meters long. If Randy bikes one and one-fourth times as fast as Alex, but Alex has a 500 meter head start, how many laps will it take for Randy to catch up with Alex? Assume that Randy bikes at a rate of 8 meters per second, and that Randy and Alex start at the same time and bike in the same direction. If your answer is not a whole number, give it as a decimal.
35	A fast clock is set correctly at 12:00 noon, but it gains 4 minutes an hour. What will be the correct time when the fast clock next shows 12:00 midnight?

36	If a rectangle has a perimeter of 30 inches and the length is 3 inches more than twice the width, what is the area of the rectangle, in square inches?
37	Originally, Rosa had only red marbles and Billy had only blue marbles. First, Rosa gave half her marbles to Billy. Then Billy gave half his blue marbles to Rosa. Finally, Rosa gave half her blue marbles to Billy. Now Billy has 11 marbles (5 red and 6 blue). How many marbles does Rosa have now?
38	Jamie and Julie are on a roller coaster ride at Silverwood Park. The probability that Julie will let go of the bar is $\frac{1}{3}$. When riding alone, Jamie will scream with a probability of $\frac{1}{4}$. However, when they ride together, the probability that Jamie screams is doubled if Julie lets go of the bar. As a reduced fraction, what is the probability that Jamie screams when the two ride together?
39	Before it performs calculations, my Enlarging Calculator automatically adds 77 to every even number I enter and triples every odd number I enter. It calculates correctly, using the enlarged numbers, then correctly displays the results of its calculations. I enter a 2-digit counting number, then "+", then a second 2-digit counting number. The calculator displays the sum "146". What is the largest possible number I could have entered?
40	<p>A cube three inches on an edge is made from white unit cubes, each one inch on an edge. I want to paint as many of the unit faces blue as possible, but no two blue unit faces can share a side. It's OK for blue unit faces to touch diagonally, however. (See the diagrams for examples.) Find the largest number of unit faces of this cube that I can paint blue.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>ALLOWED</p> </div> <div style="text-align: center;">  <p>NOT ALLOWED</p> </div> <div style="text-align: center;">  <p>NOT ALLOWED</p> </div> </div>

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Team Multiple Choice Contest - Scenario

MOSES LAKE BALLOON FESTIVAL May 17-25, 2009

Welcome to the 38th annual Moses Lake Balloon Festival, an international celebration of hot-air balloons! Since its first year with 13 balloons, the Festival has increased in size every year to over 600 balloons in 2009.

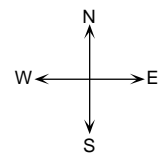
During the Dawn Patrol, volunteer pilots test the wind speed and direction at different heights above ground. A Mass Launch is when all balloons launch within a short time. For a Glow Show, balloons are lit from inside to glow in the dark. In Flying Contests, pilots must drop markers on targets to win prizes. The "Shapes" display is for balloons with special shapes.

SCHEDULE	Sat 5/17	Sun 5/18	Mon 5/19	Tu 5/20	Wed 5/21	Th 5/22	Fri 5/23	Sat 5/24	Sun 5/25
5:15-6:30 AM	Dawn Patrol	Dawn Patrol	Dawn Patrol	Dawn Patrol	Dawn Patrol	Dawn Patrol	Dawn Patrol	Dawn Patrol	Dawn Patrol
6:30-8:00 AM	Mass Launch	Mass Launch			Mass Launch	'Shapes' Display	'Shapes' Display	Mass Launch	Mass Launch
8:00-10:00 AM			Flying Contest	Flying Contest	Flying Contest	Flying Contest	Flying Contest		
5:00-6:00 PM	GasRace* starts								
6:00-8:00 PM	Glow Show	Glow Show				Glow Show	Glow Show	Glow Show	
8:00-9:00 PM	Fireworks	Fireworks				Fireworks	Fireworks	Fireworks	

*GasRace: Pilots in helium balloons try to see who can get farthest before touching down. Results of the 2008 race are given below (some results missing). Assume all flight for a balloon is in the same direction.

Balloon name	Time aloft	Distance	Ave. speed	RANK
Fire-Fly	40 hr			
Uplift		1080 km		
Joyride	70 hr	1295 km		
Light Show	68 hr			

TICKET PRICES
Half-day: \$5
Full day: \$8
9-day pass: ??



Date & Time	Wind speed	Wind direction
5/17/09 6:00 AM	5.0 mph	SE (140°)

Questions are on next page.

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Team Multiple Choice Contest - Questions

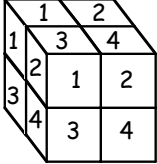
MOSES LAKE BALLOON FESTIVAL May 17-25, 2009

1	In what year was the first annual Moses Lake Balloon Festival? A) 1971 B) 1972 C) 1973 D) 1983 E) Answer not given.
2	Kathy's family will go to the Festival for 3 days in a row, and Kathy gets to choose the dates. However, it is impossible for Kathy to choose the dates so that she can see her favorite event 3 times. What is Kathy's favorite event? A) Glow Show B) Dawn Patrol C) Mass Launch D) Flying Contest E) Fireworks
3	Gordon wants to see at least 3 Mass Launches, 2 Glow Shows, 1 Shapes Display, and 3 Flying Contests. Gordon must attend the Festival for at least how many different days? (The days he attends do not need to be consecutive.) A) 9 B) 4 C) 3 D) 6 E) Answer not given.
4	A half-day ticket gets you into either all AM events or all PM events for one day. If the 9-day pass saves you \$10 over the cheapest combination of half-day and full-day tickets that would allow you to attend the entire festival, how much does a 9-day pass cost? A) \$50 B) \$60 C) \$62 D) \$40 E) Answer not given.
5	In every year of the Festival, the number of participating balloons has been a multiple of the original number. What is the smallest number of balloons that could be participating in 2009? A) 601 B) 494 C) 611 D) 507 E) Answer not given.
6	In the 2008 GasRace, Uplift averaged 3 kilometers (km) per hour more than Light Show's average speed, which was 2.5 km per hour more than Joyride's average speed. How long was Uplift aloft, to the nearest whole hour? A) 51 hr B) 50 hr C) 24 hr D) 45 hr E) Answer not given.
7	Fire-Fly's average speed in the 2008 GasRace was 4 km/hr less than the highest average speed of any of the four balloons. Fire-Fly's total distance was how many km less than the first-place winning distance? A) 800 B) 495 C) 628 D) 680 E) Answer not given.
8	If each Dawn Patrol has 12 balloons, five with 2 pilots and the rest with 1 pilot each, what is the total number of pilot-hours spent on Dawn Patrol during the festival? Round to the nearest whole hour. (A pilot-hour is one hour of one pilot's time.) A) 21 B) 191 C) 135 D) 153 E) Answer not given.
9	There are 200 balloons with special shapes. They launch in groups, each group taking 4 minutes to launch. All groups have the same number of balloons (N), except the last group (which may have fewer balloons.) The first group begins its launch at the start of the Shapes Display (and finishes 4 minutes later). If each group begins to launch as soon as the previous group has finished launching, what is the smallest value of N that would allow all "shapes" balloons to be completely launched and in the air <u>by</u> 7:15 AM? A) 18 B) 9 C) 19 D) 38 E) Answer not given.

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Team Contest

1	What point on a number line is halfway between 14 and 38?
2	<p>Each face of a $2 \times 2 \times 2$ inch cube has been marked off in four equal unit squares, which are numbered 1 through 4, as shown. You can see three faces of the cube in the figure. For the faces you can't see, each unit square is numbered the same as the unit square exactly opposite it. (For example, the unit square on the bottom face that is directly beneath the square labeled "4" on the top face will also be labeled "4".) At each corner, we can calculate the "corner sum" by adding the numbers of the 3 unit squares that meet at that corner. List all whole number values from 3 through 12 inclusive that <u>cannot</u> be a corner sum for this cube.</p> 
3	<p>Josh worked for 4 hours. He spent $\frac{1}{2}$ of his earnings from this job to buy candy, and then put \$7 in his savings account. He then had \$9 of his earnings left. How much (in dollars) did Josh earn per hour for this job?</p>
4	<p>Patricia is adding 7s and 17s together. She gets a sum of exactly 100. How many numbers did Patricia add together to get this sum?</p>
5	<p>A slow clock loses 4 minutes per hour. A fast clock gains 2.5 minutes per hour. Both clocks were set to the correct time at noon. By 2 PM that day, the fast clock will be how many minutes ahead of the slow clock? (If your answer is not a whole number of minutes, give it as a decimal.)</p>
6	<p>For every 2 blueberries Cathy eats, Denise eats 3. When Cathy has eaten 60 blueberries, how many blueberries has Denise eaten?</p>
7	<p>In Gridtown, the streets are all 2-way and run either north-south or east-west, one block apart in each case. From his house, Colin went searching for a coffee shop. He drove along the streets 18 blocks north, then 7 blocks east, then 4 blocks south, then 11 blocks west. There he stopped for a cup of coffee. He then drove back home along the streets by the shortest route. How many blocks long was Colin's return trip from the coffee shop to his house?</p>
8	<p>What is the difference between the largest and the smallest possible value of the following expression, when one of the @ symbols is replaced by an addition symbol, and the other two @ symbols are replaced by multiplication symbols? $1 @ 2 @ 3 @ 4$</p>
9	<p>There is a glitch in the display of my calculator. When I enter a number with three or more digits, it randomly selects two of those digits and adds 2 to each of them before displaying the entry. (For example, if I enter "123", it will display either 145, 343, or 325.) When I entered the same 3-digit counting number twice, the display showed 647 the first time and 629 the second time. What number did I enter?</p>
10	<p>In a particular year, March had 5 Fridays. If this was not a Leap Year, January 1st could only have been on what day or days of the week? Give the names of all possible days of the week.</p>

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Relay Contest

RELAYS - 5 minutes per relay

*There is no talking during this event and you must always be facing forward. Person #1 will be given an answer sheet(s) and will need to fill out the top. The proctor will hand out a strip of paper to each person. These need to be face down on your desk until it is time for the relay to start. Once the relay begins, everyone may turn over their strip of paper and begin working. You may write on the strip of paper to come up with your answer. However, when person #1 figures out his/her problem, he/she will record **just his/her final answer** on the answer sheet and pass only the answer sheet back to the person behind. This continues until person #4 puts an answer on the answer sheet and gives it to the proctor. A correct answer from person #1, #2 and #3 is worth 1 point each. A correct answer from person #4 is worth 2 points making each relay worth 5 points. You will see the expression **TNYWG** [Proctor: write this on the board] which means: "the number you will get". This is where you put your teammate's answer that they pass back to you, and then you should be able to solve your question. Once the relay begins, turn over your strip of paper and **make sure you have the right person number**. Remember, no talking and remain facing forward to avoid being disqualified!*

	Relay #1	Answer
Person 1	Find the number of square inches in the area of a rectangle with side lengths 3 inches and 5 inches.	15 [sq in]
Person 2	Multiply TNYWG by the sum of 4 and 8.	180
Person 3	Double TNYWG, then multiply by 5.	1800
Person 4	How many days are equal to TNYWG hours?	75 [days]
	Relay #2	Answer
Person 1	A painter can paint a shed in 4 hours. At this rate, how many sheds can 4 painters paint in 10 hours?	10 [sheds]
Person 2	A baker is carrying TNYWG dozen bagels to his display case, but he trips and drops one-third of them. How many bagels does he have left?	80 [bagels]
Person 3	There are only cows and chickens in a field. If there are eight cows and TNYWG legs, how many chickens are there in the field?	24 [chickens]
Person 4	How many positive whole numbers will divide into TNYWG with no remainder?	8 [numbers]

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Final Score:

KEY

School Name _____ Team # _____

Proctor Name _____ Room # _____ Division: _____

Mental Math Contest

MENTAL MATH - 30 seconds per question

PERSON 1 NAME:		1 or 0
1.1	Find the sum of 27 and 18.	45
1.2	How many ways can I arrange the letters in the word "May", spelled M-A-Y, if the capital M must come first?	2 [ways]
1.3	When counting backwards from 100 by 13s, the first number I say is "100". What is the next <u>even</u> number I will say?	74
1.4	What is the area, in square meters, of a square that is just large enough to enclose a circle of radius 10 meters?	400 [sq m]
PERSON 2 NAME:		
2.1	What is the sum of 6 plus 3 more than 6?	15
2.2	Wendy has 8 boxes with 5 bags in each box. Each of the bags holds the same number of pearls. If Wendy has a total of 120 pearls in all her boxes, how many pearls are in each bag?	3 [pearls]
2.3	How many meters are in two point three one kilometers?	2310
2.4	What is the difference in inches between the perimeter of a regular pentagon with sides of length 10 inches and the perimeter of a regular triangle with sides of length 7 inches?	29 [inches]
PERSON 3 NAME:		
3.1	How many seconds are in 3 minutes?	180 [sec]
3.2	A shelf in my kitchen has 3 spotted cups, 5 striped cups, and 1 checkered cup. If I select a cup at random, what is the probability that it will be spotted? Give your answer as a reduced fraction.	1/3
3.3	If fifty-three plus X is equal to seventy, then what is seventy plus X?	87
3.4	My number has two digits. If the sum of these two digits is less than 10, what is the largest my number can be?	90
PERSON 4 NAME:		
4.1	What is 555 divided by 5?	111
4.2	Find the largest whole number that can divide into both 48 and 60 with no remainder in either case.	12
4.3	Evaluate: twenty point four plus thirty point five plus ten point two. If your answer is not a whole number, give it as a decimal.	61.1
4.4	The day after tomorrow is a Sunday. What day of the week will it be twelve days after today?	Wednesday

"Math is Cool" Masters - 2008-09

May 16, 2009

4th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	Farmer John is baling hay. He makes five bales. Three bales weigh forty pounds each, and two bales weigh sixty pounds each. What is the average weight in pounds of the five bales of hay?	48 [pounds]
2	What time is it thirty-five minutes before 9:15 PM?	8:40 PM
3	The area of a rectangular playground is four thousand eight hundred square feet. The length of one side is sixty feet. In feet, what is the length of the other side?	80 [feet]
4	Biff wanted to walk to Grandma's house thirty miles away in ten hours. For the first five hours Biff walked at 4 miles per hour. What average speed, in miles per hour, does Biff need to travel in the remaining time to make it to Grandma's house in ten hours from when he started?	2 [mph]
5	The measures of two angles in a triangle are 17 degrees and 53 degrees. What is the degree measure of the third angle?	110 [degrees]
6	The product of three positive counting numbers is four hundred. What is the largest possible value of any of these three numbers?	400
7	The radius of a circle is 22 inches. What is the number of inches in the diameter of the circle?	44 [inches]
	Extra Problem - Only if Needed	
8	The perimeter of a quadrilateral is 47 feet. The lengths of three sides are 15 feet, 10 feet and 20 feet. What is the length of the fourth side, in feet?	2 [feet]

"Math is Cool" Masters - 2008-09

May 16, 2009

4th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	Today Biff is five years older than Eho and the sum of their ages is twenty-three years. In years, what will the sum of their ages be ten years from now?	43 [years]
2	If I ate one apple every six hours, how many apples would I eat in one week?	28 [apples]
3	The sum of seven, eight, eleven and another number I am thinking of equals thirty. What is the number I am thinking of?	4
4	My birthday was Wednesday. What day of the week is nine days before my birthday?	Monday
5	How many zeros are need to write the numeral one thousand?	3
6	The product of two different counting numbers is 11. What is the sum of these two numbers?	12
7	Sally picked eleven flowers. Six of the flowers had five petals, three of the flowers had four petals, and the rest had three petals. How many petals total were on all the flowers she picked?	48 [petals]
	Extra Problem - Only if Needed	
8	What is the smallest whole number into which both twenty-one and fourteen will divide with no remainder?	42

"Math is Cool" Masters - 2008-09

May 16, 2009

4th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	When two lines cross each other, they are said to "intersect". At most, how many times can a triangle and a square intersect?	6 [times]
2	The product of seven and eight is equal to the product of four and what number?	14
3	Miya has seven US coins worth exactly forty-nine cents. How many nickels does Miya have?	0 [or "none"]
4	The wool from five sheep can make nine coats. At this rate, you would need the wool from how many sheep to make twenty-seven coats?	15 [sheep]
5	In the sequence of letters M-A-T-H-M-A-T-H-M-A-T and so on, what is the twenty-fifth letter?	M
6	On a fishing trip in Alaska, Helen caught thirty-six salmon, and now she needs to ship her catch home. Each crate holds four and one-half salmon. How many crates are needed to ship the catch home, if Helen is willing to cut her salmon in half?	8 [crates]
7	Each of Matt's superhero costumes consists of one cape and one mask. If Matt has 7 different capes and can make 63 different superhero costumes, how many different masks does he have?	9 [masks]
	Extra Problem - Only if Needed	
8	The sum of two numbers is twenty-five, while the difference between the two numbers is one. What is the smaller of the two numbers?	12

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Final Score:
KEY

First Score

School Name _____ Team # _____

Proctor Name _____ Room # _____

STUDENT NAME _____ **Division:** _____

Individual Contest - Score Sheet

DO NOT WRITE IN SHADED REGIONS

	Answer	1 or 0	1 or 0
1	36 [feet]		
2	8510		
3	12 [numbers]		
4	4		
5	7		
6	16		
7	38 [¢] [NOT \$0.38]		
8	9999		
9	30 [kilograms]		
10	7		
11	7 [giraffes]		
12	3950 [cookies]		
13	2 [values]		
14	1.88		
15	8		
16	18		
17	[\$] 10.50		
18	183		
19	4 [prime numbers]		
20	12 [orders]		

	Answer	1 or 0	1 or 0
21	24		
22	5 [ounces]		
23	30 [apples]		
24	C, E [either order]		
25	15 [cookbooks]		
26	41		
27	54 [in ²]		
28	6 [pitchers]		
29	4		
30	19/99		
31	39 [miles]		
32	12 [times]		
33	221		
34	3.125 [laps]		
35	11:15 PM		
36	44 [in ²]		
37	7 [marbles]		
38	1/3		
39	36		
40	22 [faces]		

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Final Score:
KEY

School Name _____ Team # _____

First Score

(out of 18)

Proctor Name _____ Room # _____ Division: _____

Team Multiple Choice Contest - Score Sheet

TEAM MULTIPLE CHOICE - 15 minutes

This test is the only test where you will be penalized for incorrect responses. You will receive 2 points for a correct letter response, 0 points for leaving it blank and -1 point for an incorrect response. When you are prompted to begin, tear off the colored sheet, pass out a copy of the test to each team member, and begin testing. Since this is a multiple choice test, ONLY a letter response should be listed as an answer on the answer sheet.

Correct responses are worth 2 points, incorrect responses are worth -1 point and no response is 0 points.

DO NOT WRITE IN SHADED REGIONS

	Answer	-1, 0 or 2	-1, 0 or 2
1	B		
2	C		
3	E [5]		
4	A		
5	C		
6	D		
7	C		
8	B		
9	C		

"Math is Cool" Masters - 2008-09

4th Grade - May 16, 2009

Final Score:
KEY

School Name _____ Team # _____

First Score

(out of 20)

Proctor Name _____ Room # _____ Div: _____

Team Contest - Score Sheet

TEAM TEST - 15 minutes

When you are prompted to begin, tear off the colored sheet and give a copy of the test to each of your team members and begin testing. Each problem is scored as a 2 or 0.

DO NOT WRITE IN SHADED REGIONS

Answer		2 or 0	2 or 0
1	26		
2	4, 11 [either order]		
3	[\$] 8.00 or [\$] 8		
4	10 [numbers]		
5	13 [minutes]		
6	90 [blueberries]		
7	18 [blocks]		
8	15		
9	427		
10	Sun, Mon, Tues [any order]		

"Math is Cool" Masters -- 2008-09

KEY

4th Grade - May 16, 2009

School: _____ Team # _____

Proctor: _____ Room # _____ Div _____

RELAY # 1

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
15 [sq in]	180	1800	75 [days]
1 or 0	1 or 0	1 or 0	2 or 0

RELAY # 2

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
10 [sheds]	80 [bagels]	24 [chickens]	8 [numbers]
1 or 0	1 or 0	1 or 0	2 or 0