"Math is Cool" Masters – 2008-09

5th 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.

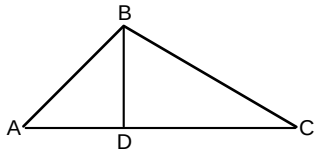
"Math is Cool" Masters – 2008-09

5th Grade – May 16, 2009

Individual Contest

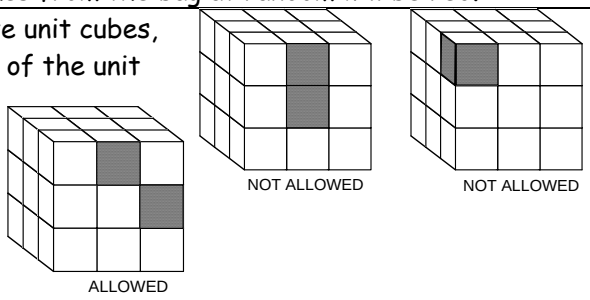
Record all answers on the colored cover sheet.

1	How many counting numbers (positive whole numbers, also called natural numbers or positive integers) are bigger than 7 but smaller than 20?
2	On a digital clock showing only the hour and the minute, what is the sum of the digits showing at 11 minutes before noon?
3	What value of x makes the following equation true? $12+3+8=1+6+x$
4	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?
5	Only giraffes and ostriches are feeding on a savanna. If there are 30 legs and 8 heads, how many giraffes are on the savanna?
6	Each of 79 boxes has 50 cookies in it. How many cookies are there in all the boxes?
7	How many of the following six values are odd? 714 8887 100 (7×5) $(1+1+1+1)$ $(7-3+7-3)$
8	Evaluate $1.23+0.69-0.04$, and give your answer as a decimal.
9	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?
10	Find the value of $18+18+18+18+18+19+19+19+18+18$.
11	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?
12	Which is bigger, 5/7 or 9/14?
13	What is the degree measure of each of the two congruent angles in an isosceles right triangle?
14	What month will it be 100 months from May? Give the name of the month, not a number.
15	Ruthie wanted to add the first 11 counting numbers, but she mistakenly left out one of the numbers. Otherwise, she added correctly, and got a sum of 59. What number did she leave out?
16	How many prime numbers are less than 20?
17	What is the median of the following set of 7 values? 17, 43.5, 9, 0.567, 18, 1/2, 25.4
18	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.
19	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?
20	Miya bought some apples at the grocery store. She gave 1/2 of her apples to John, who then gave 2/5 of these apples to Henry. Henry got 6 apples from John. How many apples did Miya buy at the store?

21	Let $A = 44 - 38$ and $B = A \div 6$. What is $A + B - \left(A \times B\right)$?
22	List the next two numbers in this sequence, in order: 5, 9, 6, 7, 7, 5, 8, 3, __, __
23	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.
24	Linda has 36 books that are either math books or cookbooks. She has 6 more math books than cookbooks. How any cookbooks does she have?
25	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?
26	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. 
27	Jack and Jill are driving their racecars toward each other from the two ends of a straight road. Jack is driving at 120 miles per hour (mph), and Jill is driving at 100 mph. They meet after 15 minutes. How many miles away from each other were they at the start?
28	Sam is now three times as old as Alan. In ten years, Sam will be twice as old as Alan. What is the sum in years of their ages now?
29	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.
30	Charlie eats 2/5 of a pie. Then Danny eats 3/4 of the remaining pie. What fraction of the pie is left?

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 third 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. Then Rosa gave half her blue marbles to Billy. Finally, Billy gave half his blue marbles to Rosa. Now Billy has 11 marbles (5 red and 6 blue). How many marbles does Rosa have now?
38	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?
39	Freddy takes one ball at random from a bag with 4 blue, 7 red, and 3 green balls, and keeps it. Freddy can tell that this ball is either red or green, but he can't tell which because he is colorblind. Find the probability that the next ball Freddy takes from the bag at random will be red.
40	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. 

"Math is Cool" Masters – 2008-09

5th Grade – May 16, 2009

Team Multiple Choice Contest - Scenario

MOSES LAKE BALLOON FESTIVAL May 17-25, 2009

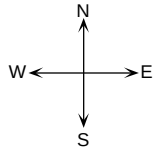
Welcome to the 38th annual Moses Lake Balloon Festival, an international celebration of hot-air balloons! Since its first year with 13 balloons, the Festival has increased in size every year to over 600 balloons in 2009.

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.

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



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

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

Questions are on the next page.

"Math is Cool" Masters – 2008-09

5th Grade – May 16, 2009

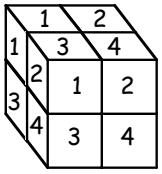
Team Multiple Choice Contest - Questions

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	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.
3	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.
4	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.
5	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.
6	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.
7	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.
8	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.
9	By 7:00 AM on May 17, wind speed had increased by 20% and the wind had shifted direction by +73°, compared to the conditions at 6:00 AM. By 8:00 AM, wind speed had increased by 20% again, and direction had shifted by –16°, compared to the 7:00 AM readings. What was the wind speed and direction at 8:00 AM? (Give wind speed in mph, to the nearest tenth. Due north (N) is 0°, the east-west arrows are at right angles to the north-south arrows, and a clockwise shift in direction is considered to be positive. The direction is named by the nearest compass point, chosen from N, NE, E, SE, S, SW, W, and NW, which mark off equal intervals.) A) 7.2 mph, SW (213°) B) 7.0 mph, NE (57°) C) 7.0 mph, SW (229°) D) 7.2 mph, S (197°) E) Answer not given.

"Math is Cool" Masters – 2008-09

5th Grade – May 16, 2009

Team Contest

1	What point on a number line is halfway between 14 and 38?
2	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. 
3	Josh worked for 4 hours. He spent $\frac{1}{4}$ of his earnings from this job to buy candy, and then put \$8 in his savings account. He then had \$14.50 of his earnings left. How much (in dollars) did Josh earn per hour for this job?
4	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?
5	What is the difference between the largest and the smallest possible value of the following expression, when two of the @ symbols are replaced by addition symbols, and the other two @ symbols are replaced by multiplication symbols? 1 @ 2 @ 3 @ 4 @ 5
6	For every 2 blueberries Cathy eats, Denise eats 3. For every 6 blueberries Denise eats, Ella eats 5. When Cathy has eaten 40 blueberries, how many blueberries has Ella eaten?
7	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?
8	Freddie, George, Henry, and Isaac each had the same amount of money, all in dimes. Freddie gave half of his dimes to George, keeping the other half. George took half the dimes he got from Freddie and gave them to Henry, keeping the other half. Henry took half the dimes he got from George and gave them to Isaac, keeping the other half. Isaac now had \$1.50 more than Freddie. How many dimes did Freddie have originally?
9	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?
10	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.

"Math is Cool" Masters – 2008-09

5th 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	What is the sum of the number four less than 15 and the number four more than 15?	30
Person 2	How many <u>even</u> whole numbers are greater than 20 but less than TNYWG?	4 [numbers]
Person 3	What is the total number of square inches in the surface area of a solid block (a rectangular prism) with edge lengths TNYWG inches, 3 inches, and 5 inches?	94 [sq in]
Person 4	Add TNYWG to the product of the four smallest prime numbers.	304
	Relay #2	Answer
Person 1	How many positive whole numbers will divide into 24 with no remainder?	8 [numbers]
Person 2	A painter can paint a shed in 4 hours. At this rate, how many sheds can TNYWG painters paint in 5 hours?	10 [sheds]
Person 3	A baker is carrying TNYWG dozen bagels to his display case, but he trips and drops one-sixth of them. He then sells $1\frac{2}{3}$ dozen bagels. How many bagels does he have left?	80 [bagels]
Person 4	There are cows and chickens in a field, with 3 times as many chickens as cows. If the cows and chickens have TNYWG legs altogether, how many chickens are there in the field?	24 [chickens]

"Math is Cool" Masters – 2008-09

5th 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	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
1.2	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]
1.3	What is one-half plus one-third? Express your answer as a reduced fraction.	5/6
1.4	How many ways can I arrange the letters in the word "mental", spelled M-E-N-T-A-L, if the L must come first?	120 [ways]
PERSON 2 NAME:		
2.1	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]
2.2	How many meters are in two point three one kilometers?	2310
2.3	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]
2.4	What number must I subtract from the product of 4 and 17 to get an answer equal to the sum of 4 and 17?	47
PERSON 3 NAME:		
3.1	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
3.2	If fifty-three plus X is equal to seventy, then what is seventy plus X?	87
3.3	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
3.4	How many seconds have elapsed from 8:15 AM to 9:20 AM the same day?	3900 [sec]
PERSON 4 NAME:		
4.1	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
4.2	The day after tomorrow is a Sunday. What day of the week will it be twelve days after today?	Wednesday
4.3	Find the sum of nine, eighteen, and twenty-seven.	54
4.4	What is the remainder when two-hundred seventy-one is divided by 3?	1

"Math is Cool" Masters – 2008-09

May 16, 2009

5th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	Eho is thinking of his favorite number. If he multiplies his favorite number by two and subtracts four, he gets forty. What is Eho's favorite number?	22
2	What is the measure, in degrees, of each angle in an equilateral triangle?	60 [degrees]
3	A palindrome is a counting number that remains the same when its digits are reversed. What is the largest 5-digit palindrome that has only one odd digit?	88988
4	Last summer, Katie grew one-half inch per week. How many inches did Katie grow in 8 weeks last summer?	4 [inches]
5	"Math is Cool" Elementary School is in the shape of a square. The perimeter of the school is one thousand four hundred feet. What is the length, in feet, of one side of the school?	350 [feet]
6	What is the sum of one, eleven, and one hundred eleven?	123
7	Tom bought four identical rare tropical crickets. He gave the clerk twenty dollars, and got three dollars and sixty cents in change. How much, in dollars, did each cricket cost, assuming there was no tax?	[$] 4.10
	Extra Problem – Only if Needed	
8	A nonagon is a polygon with how many sides?	9 [sides]

"Math is Cool" Masters – 2008-09

May 16, 2009

5th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	Eho is forty years old. What is the average, in years, of his age four years ago and his age eight years ago?	34 [years]
2	What time is it 43 minutes before an hour and a half after 3:30 PM?	4:17 PM
3	Farmer Frank was hungry and ate two dozen pancakes for breakfast. Each pancake weighed two ounces. How many pounds of pancakes did Farmer Frank eat?	3 [pounds]
4	What is the remainder when seventy-three is divided by eleven?	7
5	There are two zorgs in one nurf. There are two nurfs in one klab. There are four klabs in one gubble. How many zorgs are in one gubble?	16 [zorgs]
6	Annie is building a fence to keep the deer out of her garden. Her garden is a rectangle thirty feet by forty feet. She needs a post every ten feet. How many posts does she need?	14 [posts]
7	Hank is four and one-fourth feet tall. Sally is six and one-third feet tall. How many inches taller is Sally than Hank?	25 [inches]
	Extra Problem – Only if Needed	
8	What is the next prime number larger than twenty-nine?	31

"Math is Cool" Masters – 2008-09

May 16, 2009

5th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	Biff weighs one hundred fifty pounds on earth and thirty pounds on the moon. If Eho weighs one hundred pounds on earth, how many pounds would Eho weigh on the moon?	20 [pounds]
2	How many counting numbers are between ninety-one and seventeen? Do not include ninety-one or seventeen.	73
3	Assume that a team consists of one fourth-grader, one fifth-grader, and one sixth-grader. How many different ways could I create a team by choosing from 6 fourth-graders, 5 fifth-graders, and 3 sixth-graders?	90 [ways]
4	Evaluate: five times six minus fourteen.	16
5	The ratio of boys to girls in Math Club is two to five. There are a total of forty-nine boys and girls in the club. How many girls are there in Math Club?	35 [girls]
6	As a fraction, what is the probability that the first card you draw from a well-shuffled standard deck will be either an ace, a king, or a diamond?	19/52
7	What number must be added to one thousand one hundred eleven to get ten thousand one hundred?	8989
	Extra Problem – Only if Needed	
8	What is the largest number that can be divided into both twenty-one and ninety-eight with no remainder in either case?	7

"Math is Cool" Masters – 2008-09

5th 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	12 [numbers]		
2	15		
3	16		
4	30 [kilograms]		
5	7 [giraffes]		
6	3950 [cookies]		
7	2 [values]		
8	1.88		
9	[$] 10.50		
10	183		
11	12 [orders]		
12	5/7		
13	45 [degrees]		
14	Sept. or September		
15	7		
16	8 [primes]		
17	17		
18	24		
19	5 [ounces]		
20	30 [apples]		

	Answer	1 or 0	1 or 0
21	1		
22	9, 1 [this order]		
23	C, E [either order]		
24	15 [cookbooks]		
25	41		
26	54 [in^2]		
27	55 [miles]		
28	40 [years]		
29	19/99		
30	3/20		
31	39 [miles]		
32	12 [times]		
33	351		
34	3.125 [laps]		
35	11:15 PM		
36	44 [in^2]		
37	15 [marbles]		
38	36		
39	63/130		
40	22 [faces]		

"Math is Cool" Masters – 2008-09

5th Grade – May 16, 2009

School Name_____Team #_____

Proctor Name_____Room #_____Division: _____

Final Score:
KEY

First Score

(out of 18)

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	E [5]		
3	A		
4	C		
5	D		
6	C		
7	B		
8	C		
9	D		

"Math is Cool" Masters – 2008-09

5th Grade – May 16, 2009

School Name_____Team #_____

Proctor Name_____Room #_____Div: _____

Final Score:
KEY

First Score

(out of 20)

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	[$] 7.50		
4	10 [numbers]		
5	48		
6	50 [blueberries]		
7	18 [blocks]		
8	24 [dimes]		
9	427		
10	Sun, Mon, Tues [any order]		

"Math is Cool" Masters -- 2008-09

KEY

5th 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
30	**4 [numbers]**	**94 [sq in]**	**304**
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
8 [numbers]	**10 [sheds]**	**80 [bagels]**	**24 [chickens]**
1 or 0	1 or 0	1 or 0	2 or 0