

"Math is Cool" Championships - 2006-07

Sponsored by: Wenatchee Valley Clinic

6th Grade - March 2, 2007

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.

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6th Grade - March 2, 2007

Individual Contest

Record all answers on the colored cover sheet.

1	Evaluate: $(6 + 27) \div (22/2)$
2	How much, in dollars, would a \$25 movie cost if it were on sale for 80% of its original price and you had to pay 10% sales tax on the discounted price?
3	Evaluate: $\frac{8^2}{2^6}$
4	Round the following to the nearest thousandth: 1.41421356 [Express your answer as a decimal.]
5	True or False: The product of any two consecutive whole numbers is divisible by 2.
6	Grace is counting the loose change in her pocket. She knows she only has nickels and dimes in her pocket, the change totals \$3.00, and she has 41 coins. How many dimes does she have?
7	School starts at 8:00 A.M. Will spends twenty-five minutes eating breakfast, ten minutes taking a shower, forty-five minutes watching TV, and half an hour walking to school and still arrives fifteen minutes early. What time did Will wake up?
8	How many sides must a polygon have so that the sum of its interior angles is twice the sum of its exterior angles?
9	What is the least common multiple of 18 and 24?
10	What is the area of a circle in cm^2 whose diameter is 14 cm?
11	The "Math is Cool" Math Team has entered a math tournament where each team competes against one other team and the winner advances to next round. The "Math is Cool" Math Team won the tournament after competing in four rounds. How many teams competed in the math tournament?
12	The difference between two numbers is 17 and their sum is 99. What is the smaller of the two numbers?
13	Annie scored an 85, 95, 92, and 90 on her first four tests. If she has two tests remaining and cannot score higher than 100 on either test, what is the lowest score she can possibly receive on her next test and still be able to average a 90?
14	What is 18% of 400?
15	What is the height of a triangle in feet whose base is 10 ft and whose area is 50 ft^2 ?
16	David has 12 plaid socks, 14 wool socks, 22 polka-dot socks, and 3 dress socks. David has a math conference to attend, so how many socks must he pull from his drawer to ensure he has a pair of plaid socks?

17	Lars is doing community service by collecting cans. The first day he collects one can. The next day he collects another one can. The third day he collects the sum of the previous two days cans, so he collects 2 cans. On the fourth day, again he collects the sum of the previous two days cans so he collects 3 cans. If he continues collecting the sum of the previous two days cans, how many cans will he have collected after 8 days of collecting cans?
18	In a local 6 th grade Calculus class, for every three girls there are two boys. After ten girls and ten boys left the class to go on a math trip, there were no boys remaining in the class. How many girls were left in the classroom after the rest went on the math trip?
19	Caleb was asked to calculate the volume of a cube. He misheard and instead calculated its surface area. When he gave his answer his professor told him he was correct except his answer should have been in cm ³ instead of cm ² . Since Colin calculated the surface area correctly, what must have been the volume of the cube, in cm ³ ?
20	If $A \square B = \frac{A \times B}{2A - 2}$ what number must Y be if $4 \square Y = 4$
21	Seth and Ethan are running a race. Seth is faster than Ethan, so they decide to let Ethan get a head start. Ethan runs at 10 miles per hour and Seth runs at 15 miles per hour. How many minutes head start did Ethan get if Seth caught up to Ethan after 60 miles?
22	Mr. Wonka has opened a new widget manufacturing plant. Four whatsits make three whosits. Five whosits make six huhs. Two huhs make one widget. How many whatsits will Mr. Wonka need to make 9 widgets?
23	Tycho has just returned to point A from point B. If his trip to point B took 6 hours at 30 miles per hour, what was his average speed for the entire trip to point B and back if he drove home for two hours at 20 miles per hour and the rest of the way at 35 miles per hour?
24	Tom made a batch of cookies he plans to give to his friends at the "Math is Cool" mathathon. On his way to the mathathon he gets hungry and eats two of the cookies. Then, since he's still hungry, he stops at Three-Fingered Jack's BBQ where he gives half of his cookies to his waitress. He then gives two thirds of the remaining cookies to another waiter. When he gets to the mathathon he eats another two cookies so there are 13 cookies remaining. How many cookies were in Tom's original batch?
25	A "long diagonal" is a diagonal that has the greatest possible length connecting vertex to vertex in a polygon. How many diagonals are not "long diagonals" in a regular octagon?
26	If $x=5$, what is $\frac{2}{5}x^3 + 2x^2 + 10x$?
27	Descartes beats Fermat 3/4 of the time when they play chess but only 1/4 of the time when they play checkers. What is the probability that Descartes beats Fermat at chess, then loses to Fermat at checkers?
28	In the election for Math Team President, Keisha lost to Lee by 32 votes. Because the vote was so close, they decided to have a re-vote. All of Keisha's supporters voted for her again, but some of Lee's supporters switched their votes to vote for Keisha. Keisha won the revote by 6 votes. How many of Lee's original supporters voted for Keisha?
29	What is the distance between the rectangular coordinates (1,16) and (10,4)?

Challenge Questions

30	A cylinder has a volume of $64\pi \text{ in}^3$. If it has a total surface area of $64\pi \text{ in}^2$, what is its height?
31	A square has an area of 36 inches squared. What is the largest new square, in square inches, that can be made such that each side of the new square touches the old square?
32	Mr. Clymer is running for President of MathLand. In order to win, he knows he will have to go from town to town kissing babies. In the first town he kisses one baby, the second town he kisses two babies, in third he kisses three babies and so on until he has kissed 210 babies. How many towns did Mr. Clymer visit during his run for President?
33	How many ways can the letters in the word "BEEKEEPER" be arranged?
34	What is the probability a randomly generated four digit base 2 number will be greater than 12_8 ?
35	Silas can't decide whether to do math problems or go see a movie, so he decides to roll two six sided dice. If the sum of the two rolls is a prime number he will go to the movie, if the sum is not prime he will do math. What is the probability Silas does math?
36	A rectangle has a perimeter of 54 cm. Two thirds of its length is equal to five sixths of its width. What is the rectangle's area, in cm^2 ?
37	Seventy-five marbles are placed in boxes 1,2,3,4, and 5. Boxes 1 and 2 contain a total of 27 marbles. Boxes 2 and 3 contain a total of 25 marbles. Boxes 3 and 4 contain a total of 31 marbles. Boxes 4 and 5 contain a total of 38 marbles. How many marbles are in box 1?
38	What is the smallest positive integer that has the first nine positive integers as factors?
39	On a recent test, only sixty percent of students studied. Of those that studied, eighty percent passed. If only 20 percent of those who didn't study passed, what percentage of students passed the test?
40	Ozzie and Colin are playing a game with three dice where Colin rolls one and Ozzie rolls two. Colin wins if his roll equals or betters the sum of Ozzie's two dice (Ozzie likes this game). What is the probability Colin wins any given round?

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6th Grade - March 2, 2007

Team Multiple Choice Contest

The data for Mt. Rainier High School's Foreign Language Department are as follows:

- 130 students are taking French
- 84 students are taking Spanish
- 94 students are taking Latin
- 3 students are taking all three language classes
- Seven times as many students are taking Latin and Spanish but not French than those taking Latin, Spanish, and French
- Five times as many students are taking only Spanish than those taking French and Spanish but not Latin
- 100 students are taking only French

1	How many different students are taking French? A) 103 B) 301 C) 310 D) 130 E) 013
2	How many different students are taking Latin, Spanish, and French? A) 3 B) 94 C) 224 D) 318 E) Answer not given
3	How many different students are taking Latin and Spanish but not French? A) 12 B) 15 C) 21 D) 24 E) Answer not given
4	How many different students are taking French and Spanish but not Latin? A) 8 B) 9 C) 10 D) 11 E) Answer not given
5	How many different students are taking French and Latin but not Spanish? A) 17 B) 27 C) 20 D) 30 E) Answer not given
6	How many different students are taking foreign language classes? A) 271 B) 254 C) 244 D) 233 E) Answer not given
7	How many different students are only taking one foreign language class? A) 195 B) 203 C) 220 D) 235 E) Answer not given
8	How many different students are taking exactly two foreign language classes? A) 48 B) 51 C) 55 D) 60 E) Answer not given
9	Two students are chosen at random. What is the probability that both students chosen are taking all three foreign language classes? A) 2/32131 B) 3/32131 C) 3/32113 D) 3/32131 E) Answer not given

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6th Grade - March 2, 2007

Team Contest

1	We can define the decomplement of a digit other than 0 as the number which, when added to that digit, gives a sum of 10. (The decomplement of 0 is 0.) A decomplementing calculator converts the digits of the entered numbers to their decomplements, then correctly adds the new numbers without changing the digits of the sum. (For example, entering $278 + 12$ produces the output sum 930, since 278 is converted to 832 and 12 to 98 before adding.) When 541 and another number n are entered into the decomplementing calculator and added, the output sum is 2007. What is n ?
2	How many positive integers (counting numbers) less than 500 are multiples of 7 or of 8?
3	"Rhyming primes" are prime numbers with the same units digit (ones place digit). From a list of all primes between 70 and 100, find the sum of all primes on the list that do not rhyme with any other prime on the list. If there are no such primes, answer "0".
4	Tealah loves to eat cookie dough. She bought a tub of cookie dough that makes 210 cookies. She eats cookie dough equivalent to $3\frac{1}{2}$ cookies each day. How many days will it take her to eat the tub of cookie dough?
5	List the following in order of increasing size (smallest first). (Your answer should consist of 4 letters in the correct order.) A = the number of minutes in a day B = the number of inches in 100 meters C = the volume in cubic feet of a cube with edge length 10 feet D = 1000% of the number of ounces in a pound
6	At VideoQuest, the sales goal for 2007 is to sell 20% more DVDs than in 2006. If the store finishes the year 2007 at 10% under their sales goal, what percent of the 2006 sales were the sales for 2007?
7	On the planet Gmf, a rancher has a pasture holding a mixed herd of 5-legged sheps and 7-legged caws. The rancher stands in his pasture and counts 156 legs, including his own 3. He has more sheps than caws. What is the smallest number of animals there could be in his herd (not counting the rancher)?
8	I'm thinking of a counting number with 3 digits, all different. It has no even digits. It is a multiple of 3, and it is less than 300. How many different numbers could I be thinking of?
9	Joe went hiking. He hiked three miles per hour for four hours, then four miles per hour for two hours. How many miles did he hike?
10	Andy, Brian, Chad, and David form a team at a math contest. If Andy had scored 15 points more and Brian had scored 5 points less on an individual test at the contest, their average would have been the same as the average of their whole team for this test. If Chad's score was less than the team average on this test, what was the least number of points above the average that David could have scored? (All scores, including the average, are a whole number of points.)

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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!*

	Practice Relay	Answer
Person 1	What is 2 times 3?	6
Person 2	Add TNYWG to the positive difference between 5 and 7	8
Person 3	Multiply TNYWG by 3	24
Person 4	Add 1 to TNYWG and divide by 5	5
	Relay #1	Answer
Person 1	What is the seventh term in the sequence 37, 31, 25, 19...	1
Person 2	What is the sum of TNYWG and the area of a rectangle with side lengths of 7 and 4?	29
Person 3	Evaluate $7 \times 8 - \text{TNYWG} + 100$	127
Person 4	What is the sum of TNYWG and the sum of the positive factors of 12?	155
	Relay #2	Answer
Person 1	If the average for the following set of data is 10, what is N? 5, 7, 11, 12, N	15
Person 2	The ratio of cheerleaders to football players was 1 to 5. If TNYWG football players quit the team, the ratio of cheerleaders to football players becomes 2 to 5. How many cheerleaders are there?	6
Person 3	Find the product of TNYWG and the probability of drawing a red marble from a bag of 4 green and 8 red on the first draw?	4
Person 4	How many perfect squares are there between TNYWG and 100. (Inclusive)	9

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Final Score:

KEY

School Name _____ Team # _____

Proctor Name _____ Room # _____ Division: _____

Mental Math Contest

MENTAL MATH - 30 seconds per question

When it is time to begin, I will read the first question twice. You may not do any writing or talking while arriving at a solution. Once you have a solution, record it on the sheet in front of you. You may not change or cross out answers once you have written an answer down. If there are eraser marks, write-overs, or crossed out answers, they will be marked wrong. Once all students have laid their pencils on the desk, another question will be asked. If a student doesn't lay his/her pencil down, the maximum wait time is 30 seconds from the second reading of the question before another question is asked. You may continue to work on a problem while the next question is being read. The value of each question is a one or zero. Each student may answer only four questions, and then another member of your team will come up, until each team member has had a turn. If your team has fewer than 4 members, missing team members will receive a zero.

PERSON 1 NAME:		1 or 0
1.1	What is the product of 9 and 11?	99
1.2	What is one sixth of 42?	7
1.3	What is 20 percent of 150?	30
1.4	What is the sum of one half and one third?	5/6
PERSON 2 NAME:		
2.1	How many meters are in a kilometer?	1000 [m]
2.2	What is 1000 plus 125 plus 50 plus 25?	1200
2.3	What is the result when you divide 10 by 2 then multiply by 7?	35
2.4	What is the area of an isosceles right triangle with leg length 4?	8
PERSON 3 NAME:		
3.1	What is the sum of the first 3 prime numbers?	10
3.2	What is the diameter of a circle with radius 7?	14
3.3	What do you get when you multiply the sum of 16 and 4 by 5?	100
3.4	How many feet are in 2 miles?	10560 [ft]
PERSON 4 NAME:		
4.1	What is the area of a square with side length 11?	121 [un ²]
4.2	What is the area of a circle with radius 7?	49π [un ²]
4.3	What is one-fifth the difference of 27 and 7?	4
4.4	What is the circumference of a circle with radius 3?	6π [un]

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Division 1

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	What is the complement of a 72 degree angle, in degrees?	18 [°]
2	Trevor owns 5 pairs of shoes, 4 pants and 6 shirts. If an outfit consists of a pair of shoes, pants and a shirt, how many possible outfits can Trevor make?	120 [outfits]
3	How many ways can a club of 12 people elect a president and a vice president?	132 [ways]
4	It is 12 miles from my house to school. I drive 60 miles per hour on the way to school and 30 miles per hour on the way home. How many minutes do I spend driving to and from school every day?	36 [min]
5	A squirrel is hoarding nuts for the winter. He hoards one nut on the first day, three nuts on the second day, five nuts on the third day, seven nuts on the fourth day and so on. How many days will it take the squirrel to collect 100 nuts?	10 [days]
6	A woodpecker needs to drink a gallon of bug juice every month. A woodpecker gets a quarter of a cup of bug juice in every hole it drills. How many holes does a woodpecker need to drill each month?	64 [holes]
7	If 50% of 25% of a number is 8, what is 25% of 50% of that number?	8
	Extra Problem - Only if Needed	
8	If 6 valentines and a sticker cost \$3.20, and a sticker costs 20 cents, how much will 24 valentines and 2 stickers cost, in dollars?	[\$] 12.40

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Division 1

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	Last week Cory worked out 15 minutes longer each day than she did the day before. If on Monday she worked out for an hour, how many minutes total did she work out by the end Friday?	450 [min]
2	Joel and Tony are racing down a hill in wheeled chairs. Joel travels 6 feet per second while Tony travels 9 feet per second. After seven seconds of racing, how many yards apart are the two racers?	7 [yards]
3	On his first four tests, Josh averaged 57 percent. If a sixty percent average is passing, what percent does he need to get on his fifth and final test to pass the class?	72 [%]
4	Amanda is not an experienced driver. When it is raining, she has a one-third chance of hitting a car when she is backing out of her driveway. If she has a friend in her car, the chance that she hits a car is doubled. If it is raining and Amanda has a friend in her car, what is the probability that she backs out of her driveway without hitting a car?	1/3
5	My eraser is a rectangular prism that is one inch wide, two inches long, and half an inch tall. If I use one tenth of a cubic inch of eraser every week, how many weeks will my eraser last?	10 [weeks]
6	There are five light switches in a room, each of which can either be on or off. How many different ways can the switches be positioned?	32 [ways]
7	An isosceles triangle has sides of length 5, 5, and 6. What is the area of the triangle, in units squared?	12 [un ²]
	Extra Problem - Only if Needed	
8	What base 10 number is represented by 10011_2 ?	19

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Division 1

COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	An isosceles triangle has one angle of 108 degrees, what is the measure of another angle, in degrees?	36 [°]
2	Joan starts at 5 and counts by 11; so she counts 5, 16, 27, etc. Jim starts at 4 and counts by 13. What is the first same number they both say?	82
3	The first number of a sequence is 1. Every other number in the sequence is the sum of all the numbers before it. What is the eighth number in the sequence?	64
4	Tom starts with 24 marbles. He gives one third of his marbles to Paul, one-half of the remaining ones to Mary and one-fourth of the leftovers to Barb. How many marbles did Mary receive?	8 [marbles]
5	A palindrome is a number that reads the same backwards as forwards. How many four-digit palindromes are there?	90 [pal]
6	A three region pie chart is made dividing the area equally among the three regions. What is the central angle of measure of each region, in degrees?	120 [°]
7	What is the probability of getting three or more heads on five tosses of a fair coin?	1/2
	Extra Problem - Only if Needed	
8	What is the positive difference between the largest two-digit prime number and smallest three-digit prime number?	4

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Division 2

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	How many ways can you arrange the letters in the word NARNIA?	180 [ways]
2	What is the probability of drawing an ace or a spade from a standard deck of 52 cards?	4/13
3	Express .8 as a reduced fraction.	4/5
4	Six chickens can lay 6 eggs in 1 day. How many eggs can 12 chickens lay in 2 days?	24 [eggs]
5	I just spent half my money plus 3 dollars on gourmet bubble gum. I now have exactly enough money left to buy 4 chocolate bars that cost 1 dollar and 25 cents each. How much money, in dollars, did I have to start at the beginning?	[\$] 16
6	How many ways can I arrange 3 DVDs and 2 CDs on a shelf if I must keep the CDs together?	48 [ways]
7	Mr. Sampson can run one and a half miles in 20 minutes. At that same rate, how long, in minutes, will it take him to run 12 miles?	160 [min]
	Extra Problem - Only if Needed	
8	What common fraction is halfway in between two thirds and three fourths?	17/24

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Division 2

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	Evaluate 16 times 17.	272
2	What is the sum of two thirds, three fourths and four fifths? Express your answer as a mixed number.	2 $\frac{13}{60}$
3	A triangle has angles of 47 degrees and 12 degrees. What is the measure of the third angle, in degrees?	121 [degrees]
4	Find the circumference of a circle with area four pi.	4π [un]
5	Today is Friday. What day of the week is 22 days from now?	Saturday
6	I can run 2 miles in 12 minutes. How many miles can I run in nine fifths of an hour?	18 [miles]
7	There are 24 cookies in a box. Jenny eats half and Kathryn eats one fourth of the remaining cookies. How many cookies are left?	9 [cookies]
Extra Problem - Only if Needed		
8	Joe walked at the rate of three miles per hour for seven hours. How many miles did he travel?	21 [miles]

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Division 2

COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	From her cabin, Sarah walks 3 miles east, 12 miles south and then 8 miles west. How far away is she from her cabin, in miles?	13 [miles]
2	How many cups are in 1 and a half gallons?	24 [cups]
3	Find the volume of a cone with a base radius of 3 and a height of 7.	21π
4	What is the square root of the cube root of 64?	2
5	The grass in my yard is 2 inches tall. If it grows one fifth of an inch every week and I cut it when it is 4 inches tall, in how many days will I have to cut my grass?	70 [days]
6	What is the sum of x and y if $3x$ minus y equals 7 and $3y$ minus x equals 9?	8
7	How many sides does a dodecagon have?	12 [sides]
	Extra Problem - Only if Needed	
8	It was 58 degrees Fahrenheit yesterday. Today it is negative 21 degrees Fahrenheit. How many degrees did the temperature drop in degrees Fahrenheit?	79 [° F]

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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	3		
2	[\$] 22.00 or 22		
3	1		
4	1.414		
5	True		
6	19 [dimes]		
7	5:55 A.M.		
8	6 [sides]		
9	72		
10	49π [cm ²]		
11	16 [teams]		
12	41		
13	78		
14	72		
15	10 [ft]		
16	41 [socks]		
17	54 (cans)		
18	5 [girls]		
19	216 [cm ³]		
20	[Y=] 6		

	Answer	1 or 0	1 or 0
21	120 [min]		
22	20 [whatsits]		
23	30 [mph]		
24	92 [cookies]		
25	16 [diagonals]		
26	150		
27	9/16		
28	19 [supporters]		
29	15 [un]		
30	4 [in]		
31	72 [in ²]		
32	20 [towns]		
33	3024 [ways]		
34	5/8		
35	7/12		
36	180 [cm ²]		
37	12 [marbles]		
38	2520		
39	56 [%]		
40	35/216		

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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	D		
2	A		
3	C		
4	C		
5	A		
6	B		
7	B		
8	A		
9	D		

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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	[n =] 9672		
2	125 [integers]		
3	168		
4	60 [days]		
5	DCAB		
6	108 [%]		
7	27 [animals]		
8	4 [numbers]		
9	20 [miles]		
10	11 [points]		

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School: _____ Team # _____

Proctor: _____ Room # _____ Div _____

PRACTICE RELAY

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
6	8	24	5
1 or 0	1 or 0	1 or 0	2 or 0

RELAY # 1

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
1	29	127	155
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
15	6	4	9
1 or 0	1 or 0	1 or 0	2 or 0