

BRAINSPORTS - MATH

WHAT

- Math as a Competitive Team Sport
 - ✓ Learn and practice math skills and problem solving strategies
 - ✓ Compete to win (trophies, medals)
- Like a sports team, encourages development of each team member, cooperation, teamwork
- A different way for kids to excel and build self confidence
- Success at difficult challenges builds confidence and self-esteem



MATH IS COOL 3rd Place Individual
Division 1 4th Grade March 15, 2002
HOSTED BY MOUNT KATAHDIN HIGH SCHOOL

Math Is Cool 1st Place Individual
5th Grade Division 1 March 14, 2003
HOSTED BY JACOBUS KEMPER HIGH SCHOOL

1st Place Individual
6th Grade Division 1 February 27, 2004
HOSTED BY MOUNT KATAHDIN HIGH SCHOOL

1st Place Individual
7th Grade Division 1 October 22, 2004
HOSTED BY MOUNT KATAHDIN HIGH SCHOOL

HISTORY

Approximate Number of 2007 Teams in Washington (per grade)

- Math is Cool – 200
- Math Olympiad - 300
- State Math Championship - 150
- MathCounts – 100 (grades 6-8 combined)

WHY

- Team Work
- Problem Solving Skills
- Competition as Incentive

WHO

- Elementary Grades 4 through 6
- Middle School Grades 6 through 8
- High School
- Creating a Team – ask teachers, friends
- Coaches – parents, teachers, older students

WHEN

- Weekly Practices
- Practice season – September through January
- Competition season – February through May

WHERE

- School
- Homes
- Fire Stations

PRACTICE FORMAT

- Review Homework
- Short Lesson
- Team Problem Sets (old contests)
- Games (Krypto, Set, Sudoku)

COSTS

- \$40 to \$80 per team per contest
- Extras:
 - Copying
 - Tshirts
 - Snacks

DO

- Inform teachers and principals
- Have snacks
- Allow socializing time
- Make it fun
- Play games
- Solicit parental support

DON'T

- Allow Intimidation/bragging
- Let group grow too large

THE CONTESTS

LOCAL LEVEL

Math Olympiad (www.moems.org)

- Grades 4-6 or 7-8 (one division)
- Type of Competition: Team
- Team size: 35
- Location: Your school
- Date: five monthly contests, given from November to March
- Cost: \$85/team/year
- Team Tests: 5 non-routine problems
- Awards: plaque for top 10% of teams; trophy for top individual scorer

THE CONTESTS

LOCAL LEVEL

WSMC Middle School Math Olympiad

(www.blarg.net/~mesa/wsmc/)

- Grades 5-8 (by grade)
- Type of Competition: Team
- Team size: 3 or 4 students
- Location: 16 sites in Washington
- Date: First Saturday in May
- Cost: \$45/team
- Team tests: Significant Problem; Short Answer problems in Number Sense, Measurement, Geometric Sense, Probability & Statistics, Algebraic Sense
- Awards: Medals for superior score range, and ribbons for excellent score range

THE CONTESTS

LOCAL LEVEL

OTHER LOCAL CONTESTS

- Overlake Olympiad
- Mount Rainier Math Invitational

THE CONTESTS

STATE LEVEL

Washington State Math Championship

(www.blaine.wednet.edu)

- Grades 5-8 (by grade)
- Type of Competition: Team and Individual
- Team size: 4 students
- Location: Blaine
- Date: March
- Cost: \$45/team
- Team tests: Algebra, Geometry, Probability, Potpourri, Mental Math.
- Awards: Top 10 individuals and top 15 teams per grade
- Over 400 teams, largest academic event for the age group in WA state



AMERICAN FOOTBALL COACHES ASSOCIATION
NATIONAL AWARDS, 2002
ALL-STATE SCHOOL DISTRICT
MADISON, MISSISSIPPI

THE CONTESTS

STATE LEVEL

Math Is Cool (www.academicsarecool.com)

- Grades 4-6 (by grade)
- Type of Competition: Team and Individual
- Team Size: 4 students
- Location: Seattle, Moses Lake, and Spokane
- Date: Regional: April (4th grade); April (5th grade); March (6th grade). State top four schools and top 5 individuals from each region (per grade): May
- Cost: \$45/team plus \$15/school grade
- Team tests: multiple-choice test (with negative scoring), team test, mental math, relay, College Bowl
- Awards: Top 10 individuals and top 4 teams per grade

THE CONTESTS

STATE LEVEL

OTHER STATE CONTESTS

- Math League (www.mathleague.org)
- Continental Math League
(www.continentalmathleague.org)

THE CONTESTS

NATIONAL LEVEL

MATHCOUNTS (www.mathcounts.org)

- Grades 6-8 (One division)
- Type of Competition: Team and Individual
- Team Size: team of 4 and up to 4 additional individuals
- Location: Regional – several sites; State and National – one site, location varies
- Date: Regional – February, State – March, National – May
- Cost: \$80/team (up to 4 students) and \$20/individual
- Contest: Sprint, Target, Team
- Awards: Top 4 individuals and teams

THE CONTESTS

NATIONAL LEVEL

American Mathematics Competitions (AMC 8)

(www.unl.edu/amc/)

- Grade: Suitable for students in grades 6, 7 and 8.
- Type of Competition: Individual
- Team size: unlimited; tests sold in bundles of 10
- Location: Your school
- Date: November
- Cost: \$25 - \$45/school (early – late registration). Contest: 25 question, 40 minute multiple choice examination
- Awards: High scoring students are invited to participate in the AMC 10.

THE CONTESTS

NATIONAL LEVEL

American Mathematics Competitions (AMC 8)

(www.unl.edu/amc/)

SERIES OF NATIONAL CONTESTS

- American Mathematics Contest 8 (AMC 8)
- American Mathematics Contest 10 (AMC 10)
- American Mathematics Contest 12 (AMC 12)
- American Invitational Mathematics Examination (AIME)
- United States of America Mathematical Olympiad (USAMO)
- Math Olympiad Summer Program (MOSP)
- eventual selection of team for International Math Olympiad (IMO)

THE CONTESTS

NATIONAL LEVEL

OTHER NATIONAL CONTESTS

- Rocket City Math League (www.rocketcity.org)

STUDY RESOURCES

- ArtOfProblemSolving.com Sells textbooks for gifted math learners and offers on-line math courses
- Highline School District. An enrichment curriculum designed for 5th and 6th graders. Website: <http://home.blarg.net/~math/>
- MATHCOUNTS This program provides a new set of problems called Warmups and Workouts each year, designed to prepare students for the competition. Many of the problems are multistep and can be solved in a variety of ways; all are well written and edited. These problems are best for use in second or third year of math club study. Website: <http://mathcounts.org>
- Practice tests for many of the competitions are available on the respective websites.