

MATHCounts Video Challenge: Feed Your Creative Mathematicians!
Confratute Evening Forum, July 10, 2017
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Links:

MathCounts Website <https://www.mathcounts.org/>

MathCounts is a national program that has three components: Club Activities, Competition Series, and Video Challenge. Most funding come from corporate sponsors, so fees for schools are minimal and there is a lot of flexibility to match the programming to your students.

MathCounts Video Challenge Homepage <http://videochallenge.mathcounts.org/>

Here you will find important dates, rules for the competition, and resources to support your team as they develop their math video.

Videos (organized by the topic) : <http://videochallenge.mathcounts.org/videos>

Winning Videos: <http://videochallenge.mathcounts.org/winning-videos>

Timeline, Registration, How to Participate:

<http://videochallenge.mathcounts.org/about-math-video-challenge>

Much of the information for the 2017-2018 competition has not yet been released, but you can see a general outline of how to participate and this example timeline with a summary of important dates.

September 2017-March 2018: Program Registration + Video Submission Open

February 12, 2018: Suggested Deadline for Video Submissions

February 13-March 14, 2018: General Public Voting

March 14, 2018: Final Deadline for Video Submissions

March 16, 2018: Top 100 Videos Announced

March 26, 2018: 20 Semifinalist Videos Announced

April 2, 2018: 4 Finalist Videos Announced

May 12-15, 2018: 2018 Raytheon MATHCOUNTS National Competition in Washington, DC

Sample Problems/Videos:

2017 Winning Video: The Ladder Challenge

<http://videochallenge.mathcounts.org/videos/ladder-challenge>

Problem #50- Measurement.

When leaned against a vertical structure, a straight ladder can be used safely if its top is no more than four feet above the base of the structure for every foot that the bottom of the ladder is away from the base. How high can a 22 ft ladder safely reach up a vertical structure? Express your answer as a decimal to the nearest tenth.

2017 Finalist: Fighting a Zombie Apocalypse

<http://videochallenge.mathcounts.org/videos/fighting-zombie-apocalypse>

Problem #213 - Proportional Reasoning.

Twelve people have sheared $\frac{1}{3}$ of a field of pine trees in 7 days. How many more people need to be added to the crew to shear the rest of the trees in the field in the next 6 days?

2017 Semi-Finalist: Zauktioning

<http://videochallenge.mathcounts.org/videos/zauktioning>

Problem #49 - Algebraic Expressions & Equations

In exchange for 5 ziggles and 4 zoggles, Jessica gets 30 zaggles. In exchange for 2 ziggles and 3 zoggles, Mary gets 19 zaggles. How many zaggles should Cassie expect to get in exchange for 1 ziggle and 1 zoggle?

Tips:

1. Start early! Create a timeline with intermediate deadlines and adjust the scope of the project as necessary if deadlines are missed.
2. Have each student on the team look through the handbook and nominate 2-3 problems. Then have them attempt to solve each problem individually and get as far as they can. They can work in pairs or as a group after an initial individual attempt. (This will result in several different ways to solve each problem)
3. Watch winning videos from past years and discuss winning features:
 - i. Difficulty of Problem
 - ii. Quality of Video
 - iii. Multiple Solutions
 - iv. Real World Application
 - v. Creativity
4. From the nominated and solved problems, using the knowledge they have from watching the past videos, narrow it down to the problem they think would be best for the project.
5. Create a running list of responsibilities and assign them to a team member. Make sure each team member has at least one major responsibility.
6. Use the suggested tools and resources as appropriate. Some will fit your team, some won't.
7. Recruit other staff members and parents to support the students' effort. Does your school have a computer/technology teacher who would be willing to support them? Are parents willing to host extra meetings, provide costumes, sets, etc.?
8. Use this as an opportunity to build general skills: project management, technology, communication, etc. These are things that will benefit the students long after the project is over.
9. Use the enthusiasm and process to engage other students! Play the video at homeroom, school assemblies, etc. The voting stage is a good vehicle for this!
10. Make sure to celebrate and acknowledge the project within the school community, aside from any outside recognition from the contest.
11. HAVE FUN!!! Remember that our goal is for students to have a chance to be creative mathematicians and enjoy mathematics!