MathEdge Shines

June 2016

Creating Sharp Minds for Sharp Solutions

NEWS

MathEdge Final Contest Standings

Beginner 1:
1. Alaina Agarwal
2. Ethan Young
3. Shalika Araveeti

Intermediate 1:
1. Alan Tong
2. Allison Trinh
3. Archana Krishnan (tied)
3. Ethan Chang (tied)
5. Anna Jerotimov

Beginner 2:
1. Akhil Krishnan
2. Derek Liang
3. Amar Shetty

Intermediate 2:
1. Brandon Wu
2. Lucas Zheng
3. Mia Zhang
4. David Zeng
5. Katelyn Nguyen

Pre-Intermediate:
1. Harold Wang
2. Isaac Sun
3. Andrew Chiu
4. Ishani Das
5. Medha Yarlagadda

Advance:
1. Kyle Fu
2. Jaspreet Singh
3. Michael Fang
4. Akshay Attaluri
5. Raj Shetty

MathEdge+ May Contest Results!

Jumpstart:
1. Emily Zhang
2. Vivian Zhong
3. Akiro Udayagiri
4. Meghana Satish
5. Keshav Manavala

Beginner:
1. Vaibhav Wudaru
2. Alex Rohira
3. Fiona Huang
4. Rohan Reddy
5. Dhaeshna Booma
5. Alisa Liao

Intermediate:
1. Princeton Liu
2. Ganesh Sankar
3. Charlie Wu
4. Leo Jiang
5. Ayushi Kashyap

Advanced:
1. Kyle Fu
2. Risha Chakraborty
3. Aaron Lee
4. Richard Chen
5. Raj Thota
5. Eric Zhang

Thanks for all that participated, and congratulations to all the winners! Special congratulations to **Kyle Fu**, who became the first student at MathEdge to ever get a perfect score on our contest! Below are the solutions to each contest:

JumpStart/Beginner: http://www.mathedge.org/2015-16/2016%20JS_Beg.ans.pdf

Intermediate/Advanced: http://www.mathedge.org/2015-16/2016%20Int_Adv.ans.pdf

THIS MONTH:

6/3—6/7—Last day of classes!
6/15—5% off Fall Programs promotion ends
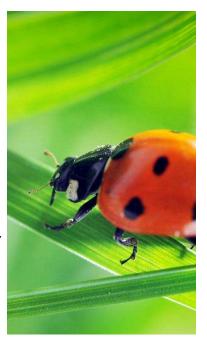
A Flutter of Red and Black

Research Paper By: Anya Hung (W2)

Coccinellidae, or ladybugs, are unlike any other beetle. Sometimes scientists and other insects can mistake them for other insects. Ladybugs are also useful as natural pesticides. Ladybugs vary in many ways, such as their shapes, sizes, species, and designs.

Ladybugs have interesting bodies. Ladybugs are oval shaped insects with six legs. They can have spots, stripes, or nothing on their wings. Ladybug species can be yellow, red, gray, black, or brown. Ladybug characteristics, such as spots, are actually determined by genes, not age. When other bugs or scientists see ladybugs, they can mistake them for something else. For example, when scientists are looking at ladybugs, they can mistake them for tortoise beetles.

The ladybug is actually a type of beetle. They eat aphids and their larvae eat the infertile eggs. Sometimes, they attack caterpillars and other species of beetles' larvae. For their diets, they eat honeydew, pollen, plant sap, nectar, and some fungi. Scientists have proved that ladybugs are now omnivorous. In the past, ladybugs were thought as purely carnivorous.

Shape, size, species, and designs are what make ladybugs cool beetles. Ladybugs are cool beetles because they look fierce to ants, but not to humans. I also like ladybugs because they help eat aphids. This is why ladybugs are my favorite insect, and why you should never kill it in nature.

Volcanoes

Research Paper By: Angela Jia (W1)

Like a sun exploding into flaming bits,
The peak explodes with a tremendous hiss,
Death kneels down at him with a tiny bow
As ash rains down and lines his brow

The mountain glows with unexpected pride,
The peak pokes through the gasping clouds
As slithering, sizzling, lava crowds,
As the "CRASH" of big stores roll down loud.

The ash and cinders dance about,
Drier than in immense drought,
Like a ballerina through the day,
Their job is making people pay,
Of stamping on the mountain's rocks all day.

The moon shines through the dry debris,
Only the silent, buzzing of bees,
And stragglers limp by with silent grief,
Viewing their home and the smoking trees,

The mountain look sat what he did,
And then a loud goodbye he gives,
Stretching slowly in the sullen night,
he goes to sleep with a small good night

How to Survive a Zombie Apocalypse

Speech By: Rakesh Nori (W3)

It is March 22, 2543 and there has been a recent zombie virus outbreak and you are one of the few remaining survivors. What do you do? How do you survive? Hello, my name is Rakesh Nori and I am a zombie apocalypse simulation survivor. I am here to talk to you today on how to survive a zombie apocalypse. To survive, you need sufficient weapons, good fitness health, and a good supply of food. I'll tell you how to train to survive and what to do in a zombie takeover.

To train for a zombie apocalypse you need to be in peak physical condition and you need to practice running. zombies love out-of-shape people. They are easier to kill and will give in quickly. That's why you should exercise every day for at least an hour. Practice running just in case the zombies in the apocalypse are fast. There is no way you can survive if the zombies can outrun you in forty yards. Let's say you escaped the zombies and you are safe… for now. What do you do now?

To survive now, you must go to the nearest gun shop and grocery story for weapons and food and water. After you have this, you should find more survivors and a hideout. The well-known quote "there is power in numbers" comes in handy when it is the zombie apocalypse. Gather a team of survivors, typically people you know and trust, and go back to your hideout. In your hideout, you must have food, water, and weapons. Have food and water that will help you and your fellow survivors last at least a month and have many weapons you can use for a while. You may be thinking of what happens if you run out of ammunition or food and water? To answer your question, I'll tell you what to do if this happens.

To refresh your supplies, you should have your hideout close to a plaza or grocery and gun stores. If your hideout is within walking distance from food and ammunition suppliers, remember to travel stealthily and silently. If you encounter a zombie try to avoid it or if that's not possible, have a weapon that makes little sound when you strike it. Travel with your team of survivors if you have one, and take as many supplies, such as ammunition, water, and food, as you can. If your hideout is not close to a food and ammunition suppliers, try to get some easy to reach transportation devices such as bikes, skateboards, or cars. If you encounter zombies, do not stop and fight no matter what. Remember your main goal is to survive and save the human race, so gather as many survivors as you can.

To survive, remember to stay fit, and have a team or survivors. Find food, water, and weapons, and have a good hideout. So if it is the zombie apocalypse, remember the tips I gave you because it may be the difference between life and death for you.

Why Can't People Have Lanyards?

Persuasive Essay by: Rori Huang (W1)

We should get lanyard string to play with everywhere. It's fun to play with, it is easy to make, and it has cool string.

Lanyard string is fun to play with. They are more fun than rainbow looms. You can make different styles and shapes. You can do them anywhere and make keychains with them. This way, lanyards are fun and easy to make.

Lanyards are easy to make. You don't need a lot of string and help. You can learn how to make it quickly and easily. You can learn it from watching YouTube, brother and sisters, and friends. In this case, lanyards can be easy to make because of all the different colors.

Lanyards have all kinds of different and cool colors. Some lanyards strings glow in the dark, while others get brighter than the sun and are very shiny like a star. Lanyard strings make you very busy, so you will be very happy and you won't bother anyone. Lanyard strings make you very quiet, an you can hear a dog barking form someone's house miles and miles away. Therefore, lanyards have all kinds of different and cool colors for kids to use.
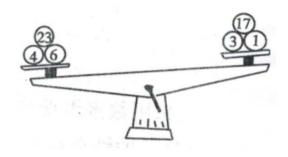
Sample Problems of the MathEdge+ May Contest

Jumpstart (K-1)

1. (1 point) The number on each ball shows its weight. Which ball should you move to the opposite side to balance the scale?

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Beginner (G2-3)

(3 points) The following is a magic square. A magic square is an arrangement of different numbers where the numbers in each row, and in each column, and the numbers in diagonal, all add up to the same number. Find the value of "d".

a	b	21
c	d	e
23	f	g

_____

Intermediate (G4-5)

1. (1 point) Your parents told you that your flight is leaving at 1:25 am on May 22, 2016, and that you need to be at the airport at least 2 ½ hours early. What is the latest time that you may arrive at the airport? Give your answer as hours : minutes and indicate a.m. or p.m., and date.

_____

2. (3 points) Rohan and Mei work on a school project to paint a wall outside their classroom. After working for three hours, James joined them and took one more hour to finish. If James did not join, Rohan and Mei would need three more hours to finish. If James painted the wall by himself, how many hours will he need to finish the work?

_____

Advanced (G6-8)

1. (4 points) If n is an integer $30 < 2^n < 500$ and , what is the sum of all of the possible values of n?

_____

2. (5 points) What is the maximum number of **2"X3"** rectangles that will fit within a **15"X15"** square without overlapping?

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Contact Us:

Request answers and solutions at http://mathedge.org/contact.html