數趣天地 MATHGAZINE

LOGOS ACADEMY OCT 2021

Math Garden: Hungry man and 100/F challenge

Mr. Chow has 200 biscuits. He needs to walk from the G/F to the 100/F. As Mr. Chow has limited energy, each time he can only carry a maximum of 100 biscuits while walking. On the other hand, he loves eating. For walking up or down one floor, he will eat one biscuit. While walking, he can choose to put down some biscuits on the floor and go down. However, you need to prepare enough biscuits for him to eat when walking down. Otherwise, he will be angry and will not do the job.
Find the maximum number of biscuits that can be carried to the 100/F.

Creativity time: Suggest some methods for Mr. Chow so that he can go back to the G/F.

A $30 Mc Donald Voucher will be rewarded for the 1st student who solves this mystery.

Information

PRESENTED BY: Π MATH CLUB 數學學會

ADVISOR:
Mr. Chan Mung Hung Sam

EDITOR:
Ms. Cheung Yui Chi Jannie
Mr. Chow Ling Hin
Mr. Ng Chun Lok Jason
Ms. Siu Kam Yi Kimmy

CLUB MEMBERS:
Chairperson: MS3E Chan Edna
Vice-chairpersons: MS3Y Lee Hau Yi
MS2I Sek Yan Tong

A gift will be given to the first 5 students who:
solve 5 puzzles correctly -- tiny gift only
solve 6 puzzles correctly -- small gift
solve 7 puzzles correctly -- bigger gift
solve ALL 8 puzzles correctly -- mega gift
Please contact Ms. Siu or Mr. Ng @ 7/F, Campus II if you know the answer.
Contributions are welcome!

Mathvengers Assemble

Video link

Math x Library

Now, you can access all Mathgazines and the ebooks: Discovering Math with Fun in the school library web site. Check here.

IG Giveaway

Continue to try more interesting questions on our instagram account!

Sudoku game

	3			2	7		5	8
2			6	8			1	
	7				5	4		2
		7		3				5
		6		9	8			
5		3	7	6	4			9
	5					2	9	
7	6	2			9		8	
8	1			5	6	7		

Alphametics

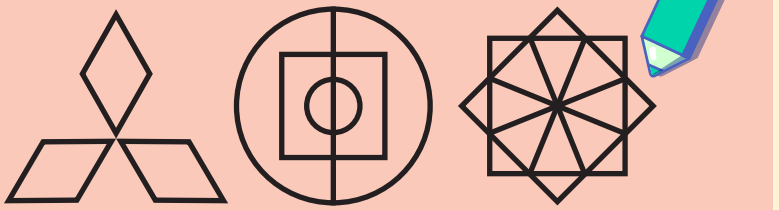
In the figure below, each distinct letter represents a unique digit such that the arithmetic sum holds.

$$\begin{array}{r} \text{MOST} \\ +\ \text{MOST} \\ \hline \text{TOKYO} \end{array}$$

Mathvengers Assemble 數神榜 2—Euler 歐拉

1. Draw draw draw

Can you draw the diagram in one stroke, and the strokes are not repeated?



Can you explain why?

2. Cross out unwanted words

Leonhard Euler (1707 – 1783) was a Swiss mathematician. He lost his ***vision/ hearing*** after a severe disease. However, he ***slept all days/ published a lot of important results*** even after his misfortunes.

Units digit mystery

What is the units digit of the number

$$\underbrace{4 \times 4 \times \ldots \times 4}_{\text{20212022 times}} ?$$

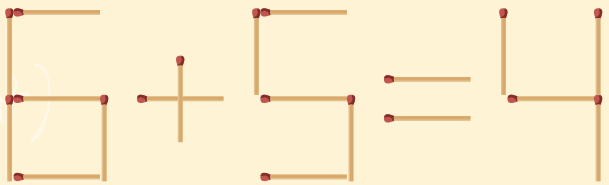
Water Challenge

You are given two containers, one has a volume of 5L while the other one has a volume of 6L. Your mother challenges you to take 3L of water from the river for her using only the above containers. How to do it?

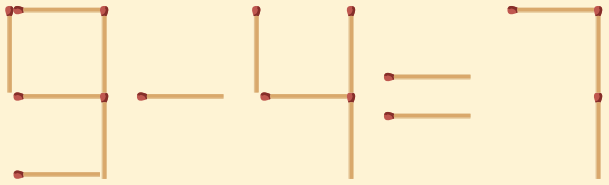
MATCH STICK MATHEMATICS

1. Move only 1 match stick in each of the following equations so that they are correct.

a.



b.



2. Can you create two smaller equilateral triangles by moving just four match sticks?