

Illustration of three children investigating. On the left, a girl with dark skin, wearing a pink hat and a yellow skirt, holds a magnifying glass. In the center, a boy with curly brown hair, wearing a blue shirt and pink pants, holds a magnifying glass. On the right, a boy with dark skin, wearing a pink hat and a brown shirt, holds a magnifying glass. Below them, a series of black footprints leads to a small blue robot with a pink brain, labeled 'TECH'.

Ryan's science project

Where is the Ryan's science project ?

Who
is
guilty?

Elfreth's Alley



This morning, in the Alley of Elfreth, a tragedy occurred !
Someone stole Ryan's science project.

He had spent hours there and hoped to get a good mark for this assignment. Unfortunately, he will not be able to present it to his class. Unless, you help him find the culprit before school starts.



- You will have to solve 11 riddles in 45 minutes.
- For each correct answer, you will receive a hint or a surprise.
- You must follow the order indicated on the map by following the footsteps.

Elfreth's Alley



House #129



House #128



House #126



House #120



House #121



House #125



House #127



House #124



House #123



House #122

The list of suspect



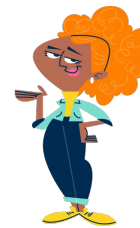
MAGGIE



ERIN



EMMY



SUSSY



TYLER



ASHLEY



LUCY



TESSA

Who
is
guilty?



BRENDAN

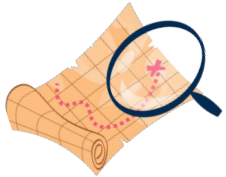


CHAD



CODY

Investigation in Elfreth's Alley



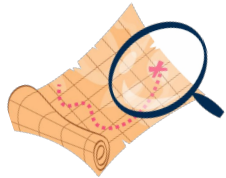
RIDDLE #1

Find the coded message !

NBUI JT GBOUBTUJD



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RIDDLE #2

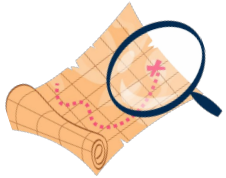
$$\text{Banjo} = \text{Guitar} + \text{Guitar} = 8$$

$$\text{Guitar} = 3 \times \text{Electric Guitar}$$

$$\text{Banjo} - 3 \times \text{Electric Guitar} + 3 \times \text{Electric Guitar} = \text{Violin}$$

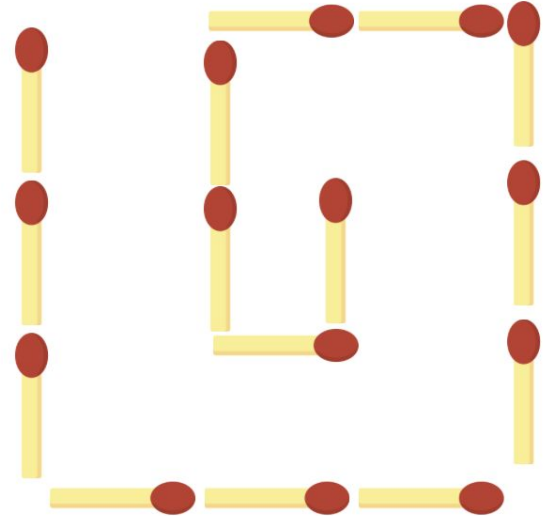
CODE =    

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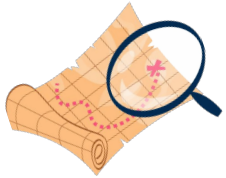


RIDDLE #3

Move 3 matches to get 2 squares.



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RIDDLE #4

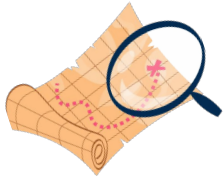
$$\text{Beach Ball 1} + \text{Beach Ball 2} + \text{Beach Ball 3} = 30$$

$$\text{Beach Ball 1} + \text{Beach Ball 4} + \text{Beach Ball 5} = 20$$

$$\text{Beach Ball 4} + \text{Beach Ball 6} + \text{Beach Ball 7} = 13$$

$$\text{Beach Ball 1} + \text{Beach Ball 4} \times \text{Beach Ball 6} = ?$$

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RIDDLE #5

Here is a magic square.

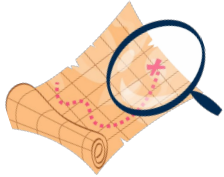
Find the number that must be put in the purple box so that the sum of each row, column and diagonal is 175.

29	38	5		18		44
25		9	43	31	40	
	33	41	4	28	16	
7	23		10		34	39
12	48		42	2		17
37	1	24		13		35
	11	49	30	?	3	26

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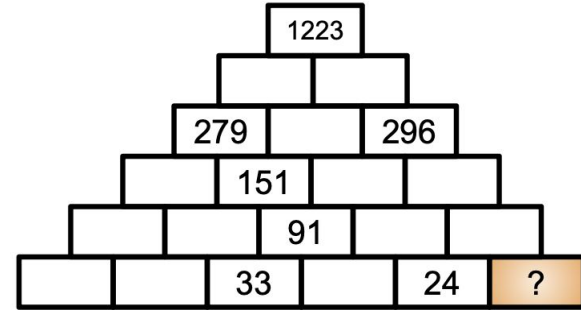


House #124



RIDDLE #6

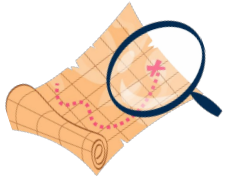
Find the number that must be put in the orange box so that each box is equal to the sum of the two numbers written on the two bricks on which it rests



Investigation in Elfreth's Alley



House #125



RIDDLE #7

$$\text{Yellow Hat} + \text{Yellow Hat} + \text{Yellow Hat} = 36$$

$$\text{Pink Hat} \times \text{Pink Hat} \times \text{Pink Hat} = 27$$

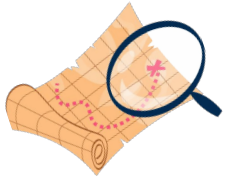
$$\text{No Hat} + \text{No Hat} + \text{Pink Hat} = 13$$

$$\text{Pink Hat} + \text{Yellow Hat} \times \text{No Hat} = ?$$

Investigation in Elfreth's Alley



House #126



RIDDLE #8

Find the anagram of these words.

TOOLS



LISTEN



MASTER



TAVERNS



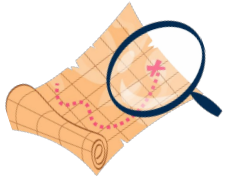
MARRIED



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House #127



RIDDLE #9

Complete this logical sequence !

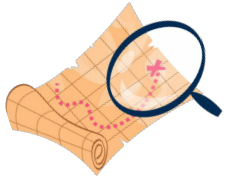
2, 20, 40, ?, 120



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House #128



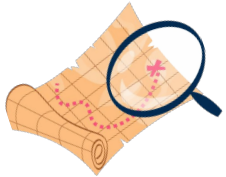
RIDDLE #10

Complete this logical sequence !

3, 9, 27, ?, 243



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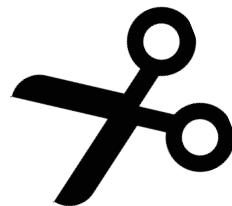
RIDDLE #11

Complete this logical sequence !

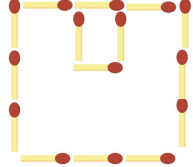
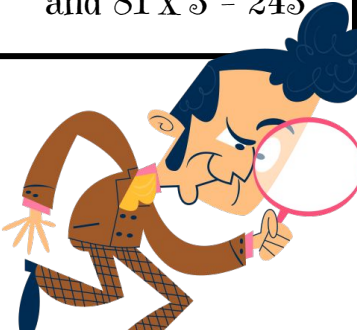
792, 927, ?



House #119	You get the list of suspects.
House #120	The guilty doesn't have pink hair.
House #121	The guilty is a girl.
House #122	 Candy 
House #123	 Candy 
House #124	 Candy 
House #125	The guilty hasn't yellow shoe
House #126	The guilty doesn't like shopping.
House #127	 Candy 
House #128	The guilty hasn't sunglasses.
House #129	The guilty has purple hair.



ANSWERS

RIDDLE #1 “Math is fantastic”	RIDDLE #2 4810	RIDDLE #3 	RIDDLE #4 10	RIDDLE #5 36
RIDDLE #6 17	RIDDLE #7 132	RIDDLE #8 STOOL SILENT STREAM SERVANT ADMIRER	RIDDLE #9 3 because $2 \times 20 = 40$ and $40 \times 3 = 120$	RIDDLE #10 81 because $27 \times 3 = 81$ and $81 \times 3 = 243$
RIDDLE #11 972 because 3 largest numbers that can be formed with 2, 7 and 9	<div> <p>The guilty is Emmy.</p>  </div>			