# MATH MYSTERY



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# Resource Instructions

### **PREPARATION**

Print and copy pages 4-11 for your students. You can do either of the following:

- Combine the pages to form a booklet for each student to work on; OR
- Hand out worksheets as you want students to work on them. Please note that if you choose this
  option, students will always need the 'Possible Suspects' page handy or leave until all five clues
  are completed.
- I recommend carrying out a demonstration and a lesson on the math skill before completing a clue if it is a concept that your students have not learned or are struggling with. Sometimes, we do a clue as a class or in groups if it is too difficult.
- You can get students to work independently or in pairs/groups. This works well for sub tubs, early finisher tasks, math centers, and enrichment groups.
- Important details about each suspect on page 5 are in a row. This information will help students decide who to eliminate after unlocking a clue. **Whole rows must be crossed off at a time**.

IMPORTANT: The clues must be completed in the order I have arranged them in:1-5!

If you want to do the clues in a different order, please keep the elimination process of the suspect list until all five clues are unlocked.

### Please <click here> to open on Google Slides

### **HOW TO USE**

Read through the article on page 4, 'Math Mystery: Case of The Troublesome Trickster,' to set up the activity and engage students. An <u>optional video hook</u> is included as a fun way to introduce this activity. After solving the case, there is also an ending video to use.

Instruct students that they will need to keep referring back to their Possible Suspect list after solving each clue to eliminate rows. Otherwise, you may wish to leave the possible suspects page until the end to solve.

Students work through each clue, guided by the teacher or independently (your choice). A clue will be revealed after completing a math worksheet if students complete the questions correctly. For example: 'Our sneaky culprit is not small.' So, in this example, students can conclude that all small-sized suspects can be eliminated. Whole suspect rows must be eliminated at a time. The last suspect row remaining will reveal the guilty suspect. Be careful; some clues are tricky!

After completing all clues, if done correctly, only one suspect will remain on the list, which is the culprit! On page 11, the teacher ticks off the 'Well done . . . ' box, and the student can receive an Award (provided on page 18) if they declare the correct answer to the mystery. If a student gets the wrong answer, tick the second box, "Oops! Try again," and instruct the student to go over their work to see where they went wrong. This mystery has an optional ending video clip in your download to wrap up the activity.

### **ANSWERS**

The answer key is found on pages 12 – 17. This includes the elimination process guide of suspects.

### **AWARDS**

On page 18, you will find awards you can print and give students who solve the case correctly. I suggest making it a rule that students complete all questions on each worksheet to be eligible for the award (even if they can guess what the clue is without finishing all math questions!). You could also make it a condition that students show their workouts on the back of the page or on a separate piece of paper if applicable.

If you need help, have questions, or notice an error in my work, please email me at <a href="mailto:JJResourceCreations@gmail.com">JJResourceCreations@gmail.com</a>.

# **MATH MYSTERY:**

### THE CASE OF THE TROUBLESOME TRICKSTER

Date:			
			_

## Mathhatten's April Fool's Day fun spoiled by malicious mischief: Master Prankster Sammy seeks Math Detective to clear his name.

In the whimsical town of Mathhatten, a peculiar tradition takes center stage every April Fool's Day. The townsfolk indulge in a friendly competition of jests and japes, all in the spirit of harmless humor. The reigning champion of these jovial jamborees is Sammy, a squirrel celebrated for his playful yet innocent pranks.

However, this year's cheerful ambiance was decidedly disrupted when a series of unpleasant pranks emerged. Far from being humorous, these pranks bred trouble and distress!

Local educator Ms. Bella Bubbles reported an arachnid invasion in her classroom that left her students petrified. "Hundreds of spiders were set free amidst my pupils! Most were terrified!" she exclaimed.

Sparky Jones, another victim of these vile ventures, cried foul when his personal items were launched into the sky, never to be seen again. **"I demand restitution for my lost belongings,"** he insisted.

A distraught Sprout Spike howled, "My bedroom has been vandalized with paint splatters. It's a disaster zone. I can't even sleep!"

Meanwhile, Chef Cookie McCrumb was grappling with an infestation of bouncing slime blobs disrupting her café, driving away customers. **"My business is losing money. Customers are fleeing, refusing to dine amid this chaos,"** she complained.

The mean mischief-maker, nicknamed the Troublesome Trickster, is wreaking havoc across town. Instead of eliciting laughter, these pranks have sparked frustration, anger, and annoyance among the townsfolk

The situation reached a boiling point this evening when the entire town's Wi-Fi was abruptly shut down, leading to a furious pack of creatures confronting Sammy, the town's known master prankster.

However, Sammy strongly denies any involvement in these malicious pranks. In a desperate bid to clear his name, he is seeking the assistance of a skilled math detective to unmask the true culprit behind this April Fool's Day disaster.

# MATH DETECTIVE URGENTLY NEEDED TO SOLVE THE CASE OF THE TROUBLESOME TRICKSTER

Name: \_\_\_\_\_

### **POSSIBLE SUSPECTS**

	PO22IBLE 202PECL2						
SUSPECT	SIZE	SPECIAL SKILL	SPEED	HIDEOUT	MOTIVE		
Sammy Squirrel	Small	Sneaky	Fast	Treehouse	Boredom		
Dan the Dragon	Large	Strong	Slow	Tunnel	Revenge		
Orion-Omega	Small	Hacking	Fast	Bookstore	Boredom		
Rosie Roarer	Medium	Hacking	Fast	Bookstore	Attention		
Chompy Charlie	Large	Strong	Fast	Tunnel	Jealousy		
Connie Maccarrot	Small	Sneaky	Slow	Treehouse	Revenge		
Trevor the Troll	Large	Hacking	Fast	Tunnel	Attention		
Slinky Snake	Medium	Sneaky	Slow	Bookstore	Revenge		
Peachy Pufflepop	Small	Disguise	Slow	Bookstore	Boredom		
Archie the Monster	Large	Hacking	Fast	Bookstore	Jealousy		
Oblang the Alien	Medium	Sneaky	Fast	Tunnel	Attention		
Pepper Pig	Medium	Disguise	Slow	Treehouse	Jealousy		
Clyde Catsby	Medium	Hacking	Slow	Treehouse	Attention		
Tao the Tiger	Large	Strong	Fast	Tunnel	Revenge		

Solve the clues and cross the suspects off the list until only one character remains! The last character remaining is the Troublesome Trickster!

Whole rows must be eliminated at a time.

Name:

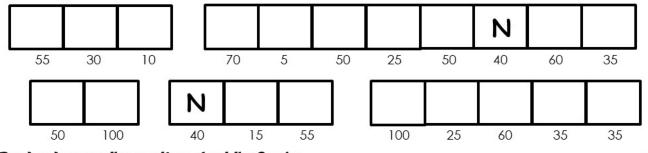
Case of The Troublesome Trickster

# **BAR GRAPHS - CLUE 1**

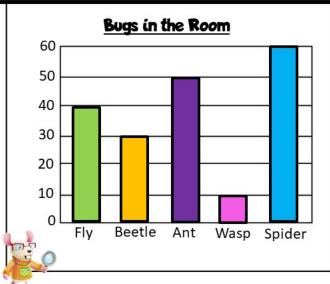


Crack the code by **answering the questions about the graphs below.** Use your answers to match and place the letters in the boxes to reveal a clue. Put the letter in every box that matches your answer (there may be more than one!) The first one has been done for you.

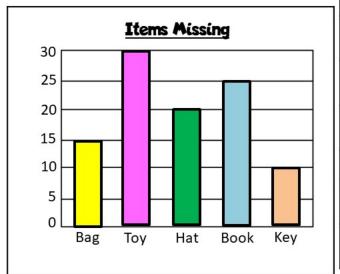
If done correctly, a clue about the criminal will be revealed.



Read and answer the questions about the Graphs.



Question	Answer	Letter
How many flies are in the room?	40	2
How many beetles are in the room?		н
How many ants are in the room?		I
How many more spiders than ants are in the room?		E
In all, how many wasps and ants are in the room?		Α
In total, how many spiders and wasps are in the room?		С



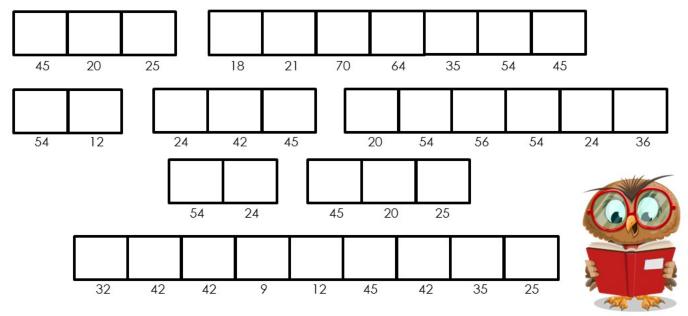
Question	Answer	Letter
How many bags and hats went missing in total?		L
How many more toys than bags went missing?		0
How many more bags than keys went missing?		R
How many books went missing?		M
In all, how many books and toys went missing?		Т
How many items went missing altogether?		5

## **MULTIPLICATION FACTS – CLUE 2**

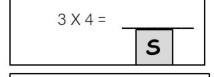
9

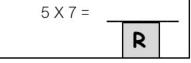
Crack the code by **completing the multiplication questions.** Use your answers to match and place the letters in the boxes to reveal a clue. Put the letter in every box that matches your answer (there may be more than one!)

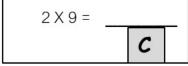
If done correctly, a clue about the criminal will be revealed.

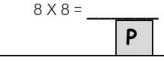


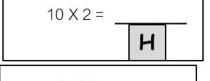
### Multiply:

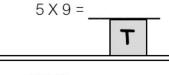


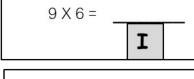


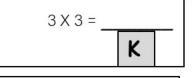




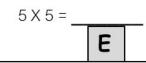


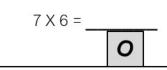










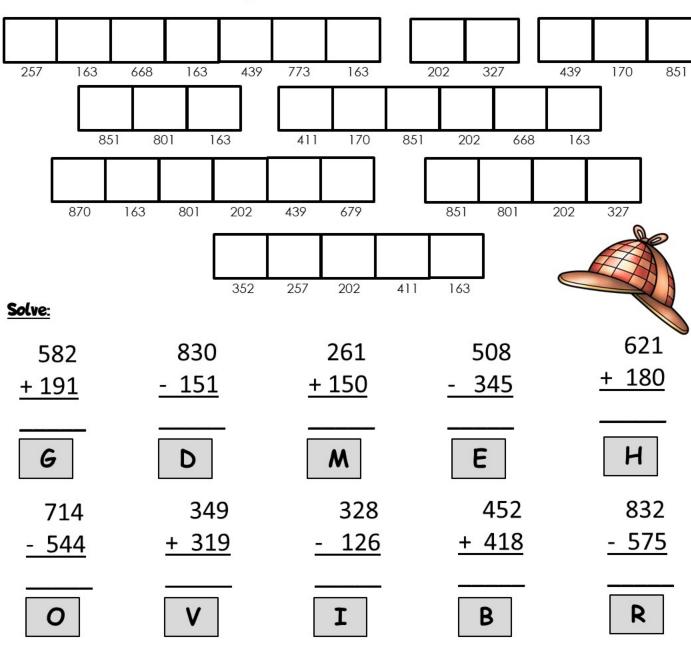


# **ADDITION & SUBTRACTION – CLUE 3**



Crack the code by **completing the addition and subtraction questions.** Use your answers to match and place the letters in the boxes to reveal a clue. Put the letter in every box that matches your answer (there may be more than one!)

If done correctly, a clue about the criminal will be revealed.





<u>+ 275</u> <u>- 262</u>

164

N

742 + 109 792 - 465

С

614

T

S

# **FRACTION MODELS – CLUE 4**



Crack the code by writing the fraction shown shaded on each shape. Use your answers to match and place the letters in the boxes to reveal a clue. Put the letter in every box that matches your answer (there may be more than one!)

If done correctly, a clue about the criminal will be revealed.

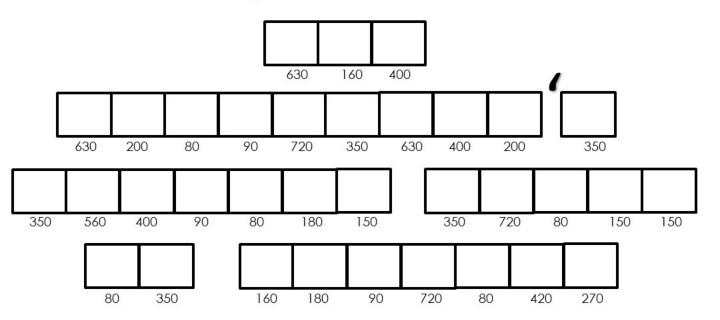
If done correctly, a clue about the criminal will be revealed. What fraction of the shape is shaded? R

# **MULTIPLYING WHOLE TENS – CLUE 5**

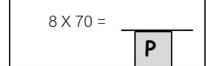


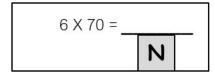
Crack the code by **completing the multiplication questions.** Use your answers to match and place the letters in the boxes to reveal a clue. Put the letter in every box that matches your answer (there may be more than one!)

If done correctly, a clue about the criminal will be revealed.



### Find the product.







# SOLVE THE MYSTERY: CASE OF THE TROUBLESOME TRICKSTER



**Detective** 

(your name)





Has discovered that the criminal is:



### **Clues Checklist:**

	00
Clue 1	
Clue 2	1

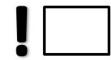
# Teacher to check and tick

Well done! You have revealed the identity of the Troublesome Trickster! Thanks to your amazing detective work, peace and Wi-Fi have been restored to Mathhatten. Happy April Fool's Day!

		2	
CI	ue	3	



		_	1
( 1	ue		1
$\sim$	$\sim$	•	



Oops! No, that is not the criminal. Go over your work, check your clues, and try again.

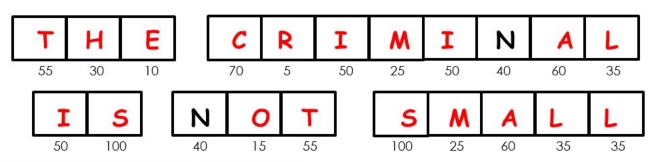
Name:

Case of The Troublesome Trickster

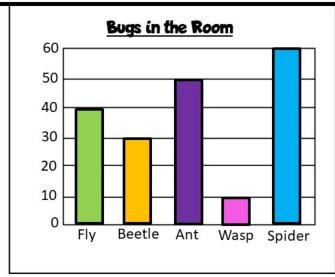
## **ANSWER KEY – CLUE 1**



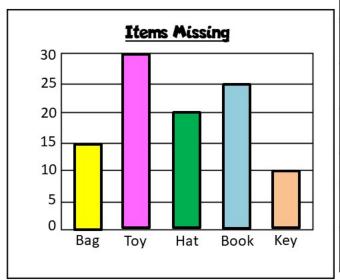
## Eliminate small suspects



Read and answer the questions about the Graphs.



Question	Answer	Letter
How many flies are in the room?	40	2
How many beetles are in the room?	30	н
How many ants are in the room?	50	I
How many more spiders than ants are in the room?	10	E
In all, how many wasps and ants are in the room?	60	Α
In total, how many spiders and wasps are in the room?	70	С

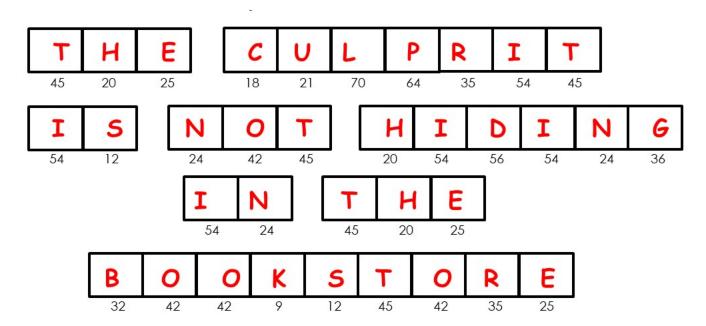


Question	Answer	Letter
How many bags and hats went missing in total?	35	L
How many more toys than bags went missing?	15	0
How many more bags than keys went missing?	5	R
How many books went missing?	25	W
In all, how many books and toys went missing?	55	Т
How many items went missing altogether?	100	5



# **ANSWER KEY – CLUE 2**

Eliminate suspects marked with 'Bookstore' as the hideout.



### Multiply:



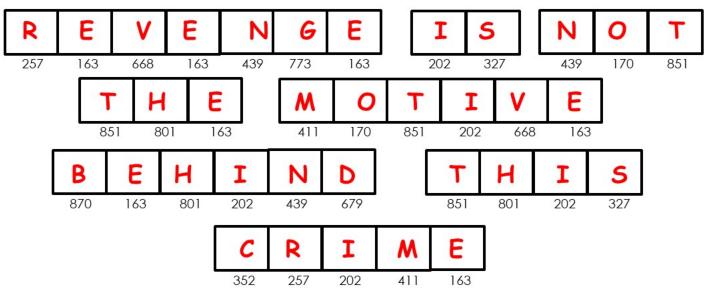
5 X 9 = **45** 

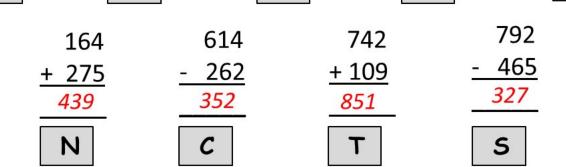
R

## ANSWER KEY – CLUE 3



Eliminate suspects marked with 'revenge' as the motive.





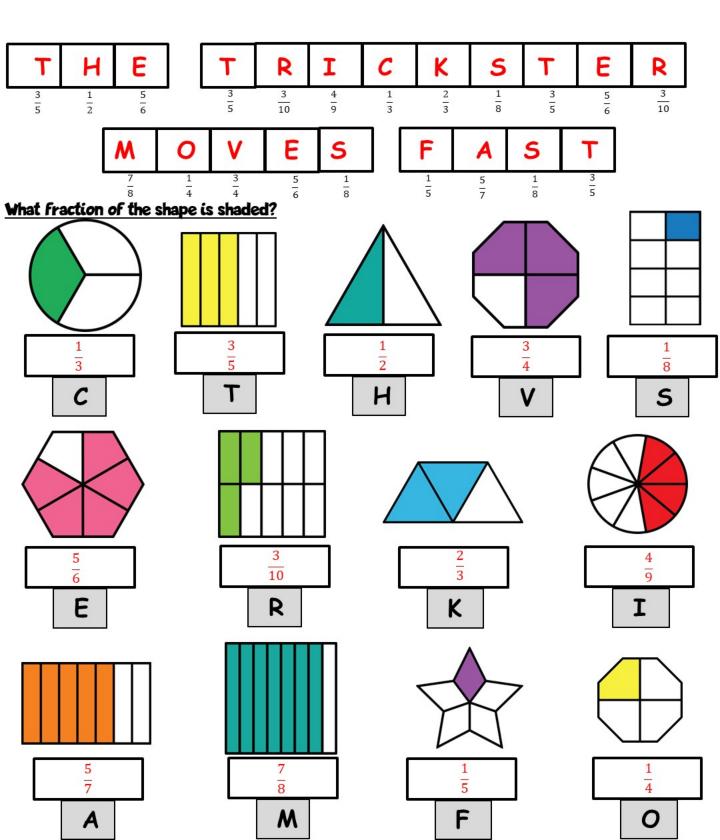
I

В

# **ANSWER KEY – CLUE 4**

9

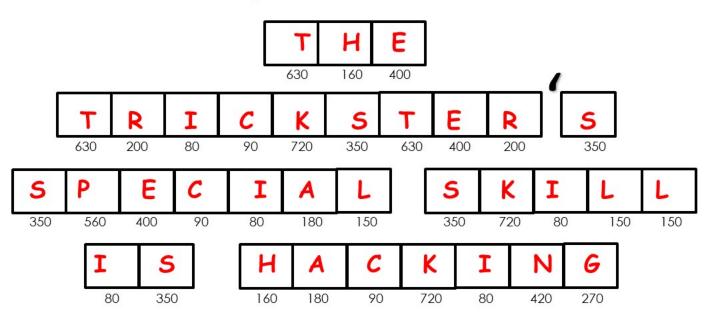
Eliminate suspects that move 'slow'.



## **a**

# **ANSWER KEY – CLUE 5**

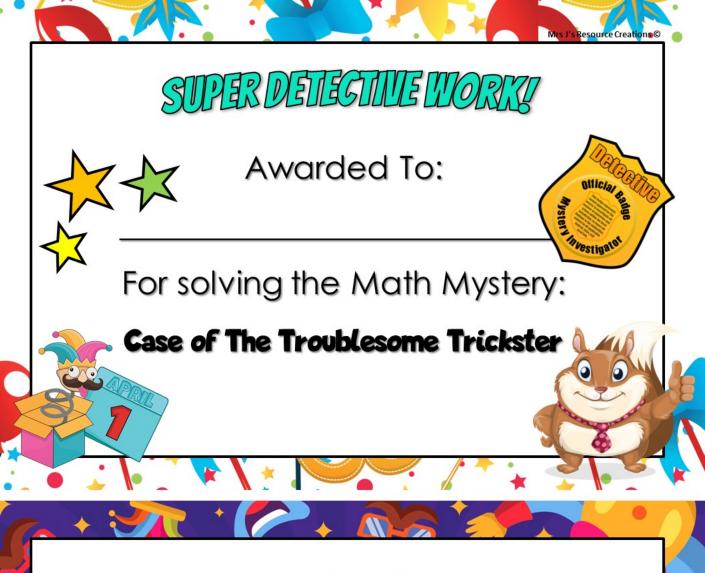
Eliminate suspects with any special skill that is not hacking. Keep any suspects with the special skill of hacking.

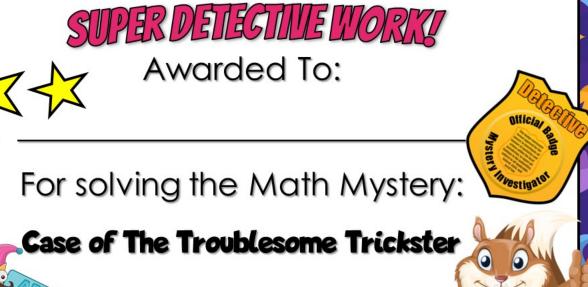


### **ELIMINATION PROCESS GUIDE**

	ELI	MIRATION	PROCESS	GGIDE	
SUSPECT	SIZE	SPECIAL SKILL	SPEED	HIDEOUT	MOTIVE
Sammy Squirrel	Small	Sneaky	Fast	Treehouse	Boredom
Dan the Dragon	Large	Strong	Slow	Tunnel	Revenge
Orion-Omega	Small	Hacking	Fast	Bookstore	Boredom
Rosie Roarer	Medium	Hacking	Fast	Bookstore	Attention
Chompy Charlie	Large	Strong	Fast	Tunnel	Jealousy
Connie Maccarrot	Small	Sneaky	Slow	Treehouse	Revenge
Trevor the Troll	Large	Hacking	Fast	Tunnel	Attention
Slinky Snake	Medium	Sneaky	Slow	Bookstore	Revenge
Peachy Pufflepop	Small	Disguise	Slow	Bookstore	Boredom
Archie the Monster	Large	Hacking	Fast	Bookstore	Jealousy
Oblang the Alien	Medium	Sneaky	Fast	Tunnel	Attention
Pepper Pig	Medium	Disguise	Slow	Treehouse	Jealousy
Clyde Catsby	Medium	Hacking	Slow	Treehouse	Attention
Tao the Tiger	Large	Strong	Fast	Tunnel	Revenge

You will find a comment on the answer sheets about what needs to be crossed off. Please refer to the font color and the shaded rows to show who has been crossed off from that clue. Whole rows must be eliminated at a time.

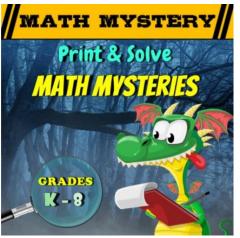






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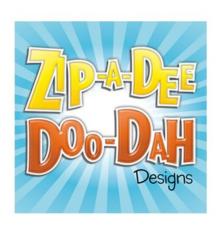


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# THANK YOU!