The Great Brickopolis Heist

Grade 5 math · Place value, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone popped the Golden Master Brick right off the top of the Brickopolis Tower! Inspect the evidence, solve the math clues, and snap the right culprit into place.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the Master Snapper is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

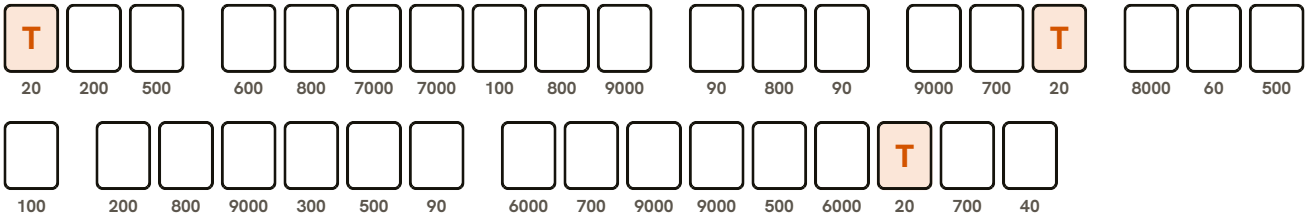
NAME	SPECIAL TECHNIQUE	TOOL	STICKER STYLE	HELMET COLOR	WEAKNESS
Brickett Penny	Quick Snapping	Hinged Connector	Crooked Sticker	Cobalt Blue	Static Cling
Blocky Bob	Brick Sorting	Hinged Connector	Crooked Sticker	Cobalt Blue	Lost Instructions
Gwen Gear	Plate Flipping	Hinged Connector	Crooked Sticker	Cobalt Blue	Lost Instructions
Wally Wedge	Plate Flipping	Brick Separator	Centered Sticker	Dark Red	Slippery Floor
Cora Corner	Quick Snapping	Glow Antenna	Crooked Sticker	Cobalt Blue	Static Cling
Tile Tyler	Quick Snapping	Flexible Hose	Crooked Sticker	Neon Yellow	Static Cling
Buster Beam	Brick Sorting	Glow Antenna	Crooked Sticker	Dark Red	Static Cling
Otto Arch	Quick Snapping	Flexible Hose	Centered Sticker	Neon Yellow	Slippery Floor
Rudy Ramp	Quick Snapping	Brick Separator	Crooked Sticker	Dark Red	Slippery Floor
Clutch Cargo	Plate Flipping	Brick Separator	Centered Sticker	Neon Yellow	Static Cling
Vic Vane	Stud Stacking	Brick Separator	Crooked Sticker	Dark Red	Static Cling
Gaby Grid	Plate Flipping	Hinged Connector	Crooked Sticker	Neon Yellow	Static Cling
Sloane Slope	Tile Sliding	Suction Cup	Centered Sticker	Cobalt Blue	Slippery Floor
Toby Tower	Tile Sliding	Brick Separator	Crooked Sticker	Neon Yellow	Static Cling
Snap Spencer	Tile Sliding	Flexible Hose	Crooked Sticker	Neon Yellow	Static Cling
Peggy Pin	Plate Flipping	Flexible Hose	Crooked Sticker	Neon Yellow	Static Cling
Builder Bella	Stud Stacking	Hinged Connector	Centered Sticker	Cobalt Blue	Static Cling
Studdy Sam	Brick Sorting	Flexible Hose	Crooked Sticker	Neon Yellow	Lost Instructions
Nelly Notch	Quick Snapping	Brick Separator	Crooked Sticker	Neon Yellow	Lost Instructions
Piper Plate	Quick Snapping	Brick Separator	Centered Sticker	Dark Red	Lost Instructions
Zack Zone	Stud Stacking	Hinged Connector	Crooked Sticker	Cobalt Blue	Lost Instructions

make your own at mathcrackers.com

CLUE 1 Place value

The digital lock on the vault recorded the exact place value digit of the total bricks clicked.

Solve each problem, then write its letter in every clue box that shows the same number.



What is the value of the 2 in 595,423? ☐ → T

What is the value of the 9 in 39,022? ☐ → N

What is the value of the 4 in 67,743? ☐ → R

What is the value of the 8 in 716,815? ☐ → I

What is the value of the 7 in 263,701? ☐ → O

What is the value of the 9 in 304,793? ☐ → D

What is the value of the 6 in 893,621? ☐ → V

What is the value of the 2 in 388,296? ☐ → H

What is the value of the 5 in 90,576? ☐ → E

What is the value of the 1 in 489,154? ☐ → A

What is the value of the 8 in 578,055? ☐ → U

What is the value of the 3 in 965,372? ☐ → G

What is the value of the 7 in 27,801? ☐ → L

What is the value of the 6 in 26,108? ☐ → C

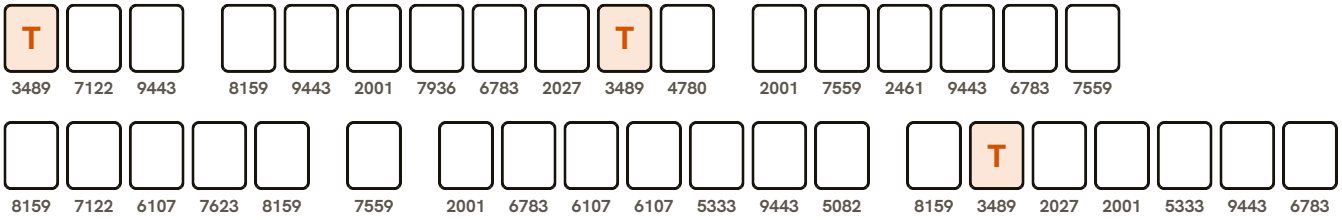
What is the value of the 6 in 197,260? ☐ → S

Scratch space:

CLUE 2 Addition

Our team added up all the scattered baseplates around the town square to find a secret clue.

Solve each problem, then write its letter in every clue box that shows the same number.



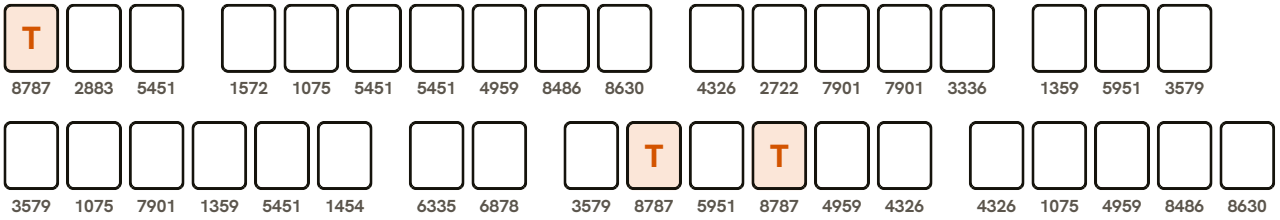
2182 + 1307 = ☐ → T	3241 + 4695 = ☐ → U	4048 + 3575 = ☐ → W
3847 + 5596 = ☐ → E	2249 + 4873 = ☐ → H	1185 + 842 = ☐ → I
1833 + 3500 = ☐ → K	1786 + 3296 = ☐ → D	1835 + 4272 = ☐ → O
1286 + 1175 = ☐ → M	4262 + 3297 = ☐ → A	3278 + 1502 = ☐ → Y
1015 + 986 = ☐ → C	2805 + 5354 = ☐ → S	4357 + 2426 = ☐ → R

Scratch space:

CLUE 3 Subtraction

By subtracting the missing yellow studs from the master kit total, we revealed a hidden code.

Solve each problem, then write its letter in every clue box that shows the same number.



13141 - 4354 = ☐ → T

2178 - 606 = ☐ → F

9893 - 1992 = ☐ → O

8186 - 2235 = ☐ → A

5582 - 2699 = ☐ → H

8858 - 3899 = ☐ → I

4111 - 532 = ☐ → S

10782 - 2152 = ☐ → G

2205 - 846 = ☐ → W

4690 - 3615 = ☐ → L

10808 - 2322 = ☐ → N

1494 - 40 = ☐ → D

6922 - 44 = ☐ → Y

5413 - 2077 = ☐ → K

2814 - 92 = ☐ → R

8712 - 2377 = ☐ → B

6542 - 1091 = ☐ → E

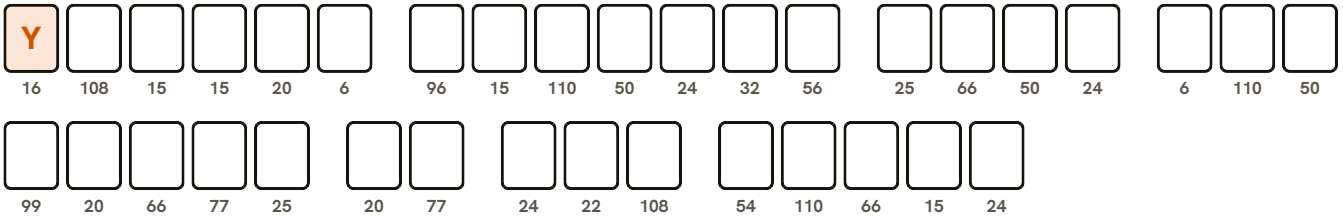
4689 - 363 = ☐ → C

Scratch space:

CLUE 4 Multiplication facts (1-12)

We calculated the total studs across the giant floor grid by multiplying the rows and columns.

Solve each problem, then write its letter in every clue box that shows the same number.



2 × 8 = ☐ → Y	9 × 12 = ☐ → E	1 × 6 = ☐ → W	
7 × 11 = ☐ → N	8 × 4 = ☐ → I	5 × 5 = ☐ → D	5 × 4 = ☐ → O
12 × 8 = ☐ → P	5 × 3 = ☐ → L	11 × 9 = ☐ → F	
7 × 8 = ☐ → C	10 × 11 = ☐ → A	9 × 6 = ☐ → V	
11 × 2 = ☐ → H	10 × 5 = ☐ → S	2 × 12 = ☐ → T	
11 × 6 = ☐ → U			

Scratch space:

CLUE 5 Division facts (1-12) - the last clue

> Dividing the leftover plastic bricks equally into storage bins unlocked the final decoder key.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

90 ÷ 9 = ☐	96 ÷ 12 = ☐	44 ÷ 11 = ☐	22 ÷ 11 = ☐	50 ÷ 10 = ☐
77 ÷ 11 = ☐	24 ÷ 2 = ☐	36 ÷ 12 = ☐	99 ÷ 9 = ☐	36 ÷ 6 = ☐
12 ÷ 12 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain stacked studs to climb the wall, then scaled the tower with a suction cup.
2. The villain slid across smooth tiles, then signaled a getaway with a glow antenna.
3. The villain slid across smooth tiles, then escaped through a hinged hatch.
4. The villain flipped baseplates over, then swung away using a flexible hose.
5. The villain sorted bricks by shape, then scaled the tower with a suction cup.
6. The villain sorted bricks by shape, then escaped through a hinged hatch.
7. The villain sorted bricks by shape, then signaled a getaway with a glow antenna.
8. The villain slid across smooth tiles, then swung away using a flexible hose.
9. The villain snapped pieces together in a flash, then swung away using a flexible hose.
10. The villain slid across smooth tiles, then pried open the vault with a separator.
11. The villain flipped baseplates over, then signaled a getaway with a glow antenna.
12. The villain snapped pieces together in a flash, then scaled the tower with a suction cup.

TEACHER / PARENT

Answer Key

The Great Brickopolis Heist

Culprit: Tile Tyler

Quick Snapping · Flexible Hose · Crooked Sticker · Neon Yellow · Static Cling

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DID NOT USE A HINGED CONNECTOR"

What is the value of the 2 in 595,423? = 20 (T) · What is the value of the 9 in 39,022? = 9000 (N) · What is the value of the 4 in 67,743? = 40 (R) · What is the value of the 8 in 716,815? = 800 (I) · What is the value of the 7 in 263,701? = 700 (O) · What is the value of the 9 in 304,793? = 90 (D) · What is the value of the 6 in 893,621? = 600 (V) · What is the value of the 2 in 388,296? = 200 (H) · What is the value of the 5 in 90,576? = 500 (E) · What is the value of the 1 in 489,154? = 100 (A) · What is the value of the 8 in 578,055? = 8000 (U) · What is the value of the 3 in 965,372? = 300 (G) · What is the value of the 7 in 27,801? = 7000 (L) · What is the value of the 6 in 26,108? = 6000 (C) · What is the value of the 6 in 197,260? = 60 (S)

Clue 2 (Addition): "THE SECURITY CAMERA SHOWS A CROOKED STICKER"

2182 + 1307 = 3489 (T) · 3241 + 4695 = 7936 (U) · 4048 + 3575 = 7623 (W) · 3847 + 5596 = 9443 (E) · 2249 + 4873 = 7122 (H) · 1185 + 842 = 2027 (I) · 1833 + 3500 = 5333 (K) · 1786 + 3296 = 5082 (D) · 1835 + 4272 = 6107 (O) · 1286 + 1175 = 2461 (M) · 4262 + 3297 = 7559 (A) · 3278 + 1502 = 4780 (Y) · 1015 + 986 = 2001 (C) · 2805 + 5354 = 8159 (S) · 4357 + 2426 = 6783 (R)

Clue 3 (Subtraction): "THE FLEEING CROOK WAS SLOWED BY STATIC CLING"

13141 - 4354 = 8787 (T) · 2178 - 606 = 1572 (F) · 9893 - 1992 = 7901 (O) · 8186 - 2235 = 5951 (A) · 5582 - 2699 = 2883 (H) · 8858 - 3899 = 4959 (I) · 4111 - 532 = 3579 (S) · 10782 - 2152 = 8630 (G) · 2205 - 846 = 1359 (W) · 4690 - 3615 = 1075 (L) · 10808 - 2322 = 8486 (N) · 1494 - 40 = 1454 (D) · 6922 - 44 = 6878 (Y) · 5413 - 2077 = 3336 (K) · 2814 - 92 = 2722 (R) · 8712 - 2377 = 6335 (B) · 6542 - 1091 = 5451 (E) · 4689 - 363 = 4326 (C)

Clue 4 (Multiplication facts (1-12)): "YELLOW PLASTIC DUST WAS FOUND ON THE VAULT"

2 × 8 = 16 (Y) · 9 × 12 = 108 (E) · 1 × 6 = 6 (W) · 7 × 11 = 77 (N) · 8 × 4 = 32 (I) · 5 × 5 = 25 (D) · 5 × 4 = 20 (O) · 12 × 8 = 96 (P) · 5 × 3 = 15 (L) · 11 × 9 = 99 (F) · 7 × 8 = 56 (C) · 10 × 11 = 110 (A) · 9 × 6 = 54 (V) · 11 × 2 = 22 (H) · 10 × 5 = 50 (S) · 2 × 12 = 24 (T) · 11 × 6 = 66 (U)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Tile Tyler

90 ÷ 9 = 10 · 96 ÷ 12 = 8 · 44 ÷ 11 = 4 · 22 ÷ 11 = 2 · 50 ÷ 10 = 5 · 77 ÷ 11 = 7 · 24 ÷ 2 = 12 · 36 ÷ 12 = 3 · 99 ÷ 9 = 11 · 36 ÷ 6 = 6 · 12 ÷ 12 = 1