The Secret Lair Mystery

Grade 1 math · Addition, Subtraction, Multiplication, Skip counting, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone snuck into the secret lab and took the big shiny energy gem! Search for clues to find out which villain did it.

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 Troublemaker is _____

Possible suspects

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

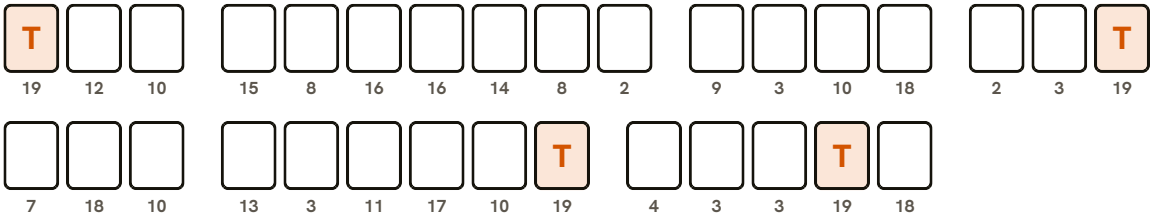
NAME	GADGET	RIDE	EYE GEAR	HAIRSTYLE	WEAKNESS
Tinker Tom	Zap Blaster	Flying Craft	Wears Goggles	Wild Blue Hair	Loud Bells
Sprocket Sam	Freeze Laser	Hover Scooter	No Goggles	Spike Green Hair	Bright Flashlights
Fizzy Fred	Zap Blaster	Flying Craft	No Goggles	Wild Blue Hair	Banana Jam
Rusty Rick	Shrink Ray	Rocket Boots	Wears Goggles	Wild Blue Hair	Bright Flashlights
Minion Pip	Zap Blaster	Flying Craft	Wears Goggles	Wild Blue Hair	Banana Jam
Gizmo Gus	Shrink Ray	Flying Craft	Wears Goggles	Spike Green Hair	Bright Flashlights
Minion Kevin	Zap Blaster	Anti Gravity Belt	No Goggles	Shiny Bald Head	Banana Jam
Dr Hiss	Zap Blaster	Hover Scooter	Wears Goggles	Wild Blue Hair	Bright Flashlights
Agent Snip	Goo Launcher	Rocket Boots	No Goggles	Spike Green Hair	Bright Flashlights
Baron Bolt	Shrink Ray	Flying Craft	No Goggles	Spike Green Hair	Bright Flashlights
Victor Vain	Magnet Cannon	Super Speed Helmet	No Goggles	Spike Green Hair	Loud Bells
Noodle Ned	Magnet Cannon	Hover Scooter	No Goggles	Wild Blue Hair	Bright Flashlights
Prof Pop	Goo Launcher	Hover Scooter	No Goggles	Spike Green Hair	Loud Bells
Minion Otto	Goo Launcher	Flying Craft	No Goggles	Spike Green Hair	Bright Flashlights
Minion Tim	Freeze Laser	Anti Gravity Belt	No Goggles	Shiny Bald Head	Bright Flashlights
Bimble Ben	Freeze Laser	Anti Gravity Belt	Wears Goggles	Wild Blue Hair	Banana Jam
Sparky Sid	Goo Launcher	Flying Craft	Wears Goggles	Shiny Bald Head	Bright Flashlights
Bumper Bill	Zap Blaster	Super Speed Helmet	Wears Goggles	Spike Green Hair	Loud Bells
Zippy Zed	Magnet Cannon	Flying Craft	No Goggles	Spike Green Hair	Banana Jam
Captain Clank	Freeze Laser	Super Speed Helmet	Wears Goggles	Spike Green Hair	Bright Flashlights
Major Mash	Shrink Ray	Anti Gravity Belt	No Goggles	Spike Green Hair	Bright Flashlights

make your own at mathcrackers.com

CLUE 1 Addition

We added up all the stolen test tubes on the table.

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



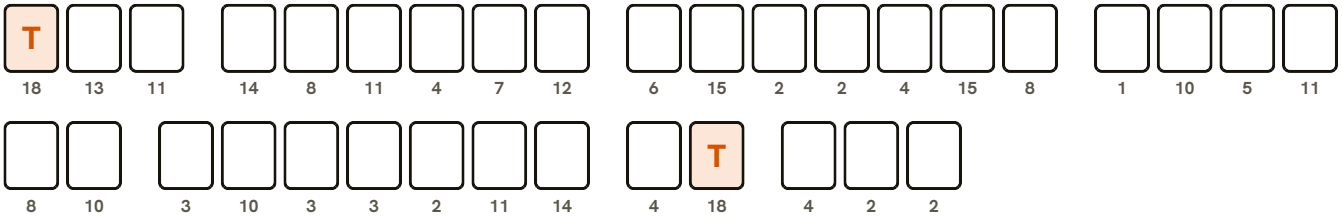
12 + 7 = ☐ → T	1 + 1 = ☐ → N	4 + 7 = ☐ → C	1 + 2 = ☐ → O
5 + 13 = ☐ → S	9 + 6 = ☐ → V	5 + 4 = ☐ → D	6 + 6 = ☐ → H
2 + 2 = ☐ → B	3 + 10 = ☐ → R	9 + 5 = ☐ → A	8 + 9 = ☐ → K
4 + 3 = ☐ → U	7 + 3 = ☐ → E	6 + 10 = ☐ → L	4 + 4 = ☐ → I

Scratch space:

CLUE 2 Subtraction

We took away the broken gears to clean up the bench.

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



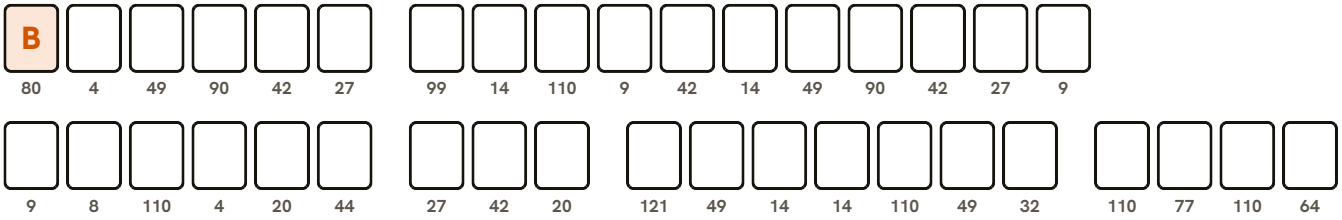
20 - 2 = ☐ → T	14 - 7 = ☐ → K	8 - 7 = ☐ → W	10 - 4 = ☐ → V
14 - 3 = ☐ → E	18 - 3 = ☐ → I	6 - 2 = ☐ → A	20 - 8 = ☐ → Y
14 - 6 = ☐ → N	7 - 4 = ☐ → G	20 - 6 = ☐ → S	10 - 8 = ☐ → L
8 - 3 = ☐ → R	15 - 2 = ☐ → H	11 - 1 = ☐ → O	

Scratch space:

CLUE 3 Multiplication facts (1-12)

> We counted the rows of mini gadgets on the shelf.

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



10 × 8 = ☐ → B

4 × 5 = ☐ → E

7 × 11 = ☐ → W

11 × 11 = ☐ → V

11 × 9 = ☐ → F

3 × 3 = ☐ → S

7 × 7 = ☐ → I

4 × 11 = ☐ → D

10 × 9 = ☐ → G

4 × 8 = ☐ → N

7 × 6 = ☐ → H

9 × 3 = ☐ → T

10 × 11 = ☐ → A

2 × 4 = ☐ → C

8 × 8 = ☐ → Y

2 × 2 = ☐ → R

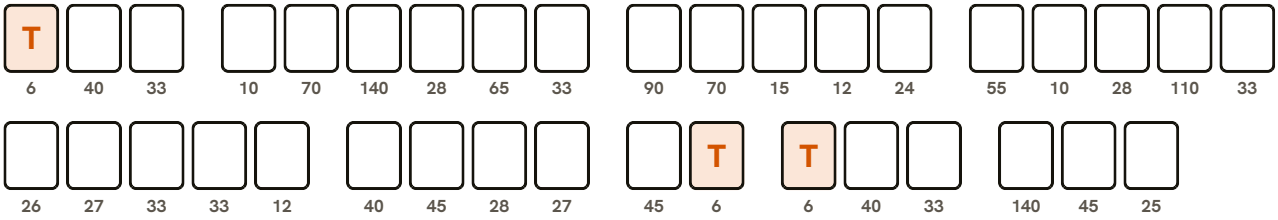
2 × 7 = ☐ → L

Scratch space:

CLUE 4 Skip counting

We skip counted the boots printed on the floor.

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



Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 [ ] → T

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 [ ] → K

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 [ ] → E

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 [ ] → L

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 [ ] → R

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, ___, 28, 30 [ ] → G

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 [ ] → C

Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 [ ] → U

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 [ ] → B

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, ___, 26, 28 [ ] → D

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 [ ] → I

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 [ ] → P

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 [ ] → F

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 ☐ → **S**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → **A**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 ☐ → **O**

Skip-count by 10s. Fill the blank: 10, 20, 30, ___, 50, 60 ☐ → **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 ☐ → **N**

Scratch space:

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

> We split the banana snacks equally among the team.

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 ÷ 10 = ☐	48 ÷ 8 = ☐	8 ÷ 4 = ☐	72 ÷ 6 = ☐	35 ÷ 7 = ☐
22 ÷ 2 = ☐	33 ÷ 11 = ☐	28 ÷ 4 = ☐	24 ÷ 6 = ☐	56 ÷ 7 = ☐
1 ÷ 1 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain turned on the magnet cannon, then flew away in a flying craft.
2. The villain fired the freeze laser, then zipped by on a hover scooter.
3. The villain squirted the goo launcher, then zipped by on a hover scooter.
4. The villain squirted the goo launcher, then zipped off in rocket boots.
5. The villain turned on the magnet cannon, then dashed fast with a super speed helmet.
6. The villain blasted the shrink ray, then floated up with an anti gravity belt.
7. The villain turned on the magnet cannon, then zipped off in rocket boots.
8. The villain shot the zap blaster, then flew away in a flying craft.
9. The villain blasted the shrink ray, then flew away in a flying craft.
10. The villain squirted the goo launcher, then flew away in a flying craft.
11. The villain shot the zap blaster, then dashed fast with a super speed helmet.
12. The villain shot the zap blaster, then zipped by on a hover scooter.

TEACHER / PARENT

Answer Key

The Secret Lair Mystery

Culprit: Minion Otto

Goo Launcher · Flying Craft · No Goggles · Spike Green Hair · Bright Flashlights

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE ROCKET BOOTS"

12 + 7 = 19 (T) · 1 + 1 = 2 (N) · 4 + 7 = 11 (C) · 1 + 2 = 3 (O) · 5 + 13 = 18 (S) · 9 + 6 = 15 (V) · 5 + 4 = 9 (D) · 6 + 6 = 12 (H) · 2 + 2 = 4 (B) · 3 + 10 = 13 (R) · 9 + 5 = 14 (A) · 8 + 9 = 17 (K) · 4 + 3 = 7 (U) · 7 + 3 = 10 (E) · 6 + 10 = 16 (L) · 4 + 4 = 8 (I)

Clue 2 (Subtraction): "THE SNEAKY VILLAIN WORE NO GOGGLES AT ALL"

20 - 2 = 18 (T) · 14 - 7 = 7 (K) · 8 - 7 = 1 (W) · 10 - 4 = 6 (V) · 14 - 3 = 11 (E) · 18 - 3 = 15 (I) · 6 - 2 = 4 (A) · 20 - 8 = 12 (Y) · 14 - 6 = 8 (N) · 7 - 4 = 3 (G) · 20 - 6 = 14 (S) · 10 - 8 = 2 (L) · 8 - 3 = 5 (R) · 15 - 2 = 13 (H) · 11 - 1 = 10 (O)

Clue 3 (Multiplication facts (1-12)): "BRIGHT FLASHLIGHTS SCARED THE VILLAIN AWAY"

10 × 8 = 80 (B) · 4 × 5 = 20 (E) · 7 × 11 = 77 (W) · 11 × 11 = 121 (V) · 11 × 9 = 99 (F) · 3 × 3 = 9 (S) · 7 × 7 = 49 (I) · 4 × 11 = 44 (D) · 10 × 9 = 90 (G) · 4 × 8 = 32 (N) · 7 × 6 = 42 (H) · 9 × 3 = 27 (T) · 10 × 11 = 110 (A) · 2 × 4 = 8 (C) · 8 × 8 = 64 (Y) · 2 × 2 = 4 (R) · 2 × 7 = 14 (L)

Clue 4 (Skip counting): "THE POLICE FOUND SPIKE GREEN HAIR AT THE LAB"

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 = 110 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 = 33 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 = 27 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, ___, 28, 30 = 26 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (C) · Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 = 15 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 = 25 (B) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, ___, 26, 28 = 24 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 = 70 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, ___, 50, 60 = 40 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 = 12 (N)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Minion Otto

90 ÷ 10 = 9 · 48 ÷ 8 = 6 · 8 ÷ 4 = 2 · 72 ÷ 6 = 12 · 35 ÷ 7 = 5 · 22 ÷ 2 = 11 · 33 ÷ 11 = 3 · 28 ÷ 4 = 7 · 24 ÷ 6 = 4 · 56 ÷ 7 = 8 · 1 ÷ 1 = 1