The Outpost Sabotage Mystery

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

Detective: _____ **Date:** _____

An unknown infiltrator disabled the main shield array at the outpost during night patrol. Detective, gather clues from around the base to unmask the culprit before they escape.

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 infiltrator is _____

Possible suspects

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

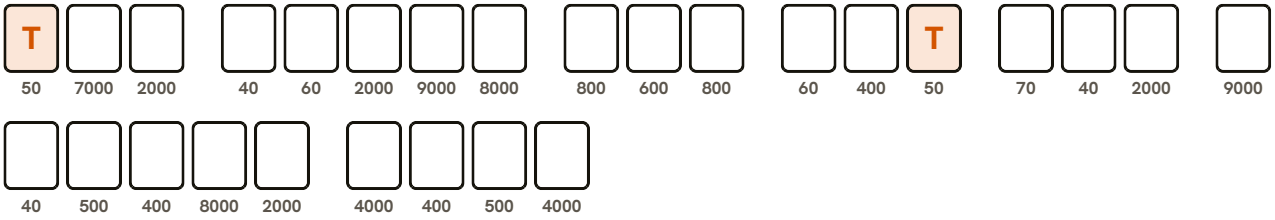
NAME	PRIMARY WEAPON	TACTICAL GEAR	DOMINANT HAND	HELMET DESIGN	COUNTER DEFENSE
Matchstick	Electro Staff	Grappling Hook	Right Handed	Blue Helmet Stripes	Sonic Whistle
Echo	Jetpack Blast	Cloaking Device	Left Handed	Red Helmet Stripes	Magnet Trap
Kix	Thermal Detonator	Cloaking Device	Right Handed	Red Helmet Stripes	Magnet Trap
Rex	Force Push	Smoke Bomb	Left Handed	Gold Helmet Stripes	Sonic Whistle
Jesse	Jetpack Blast	Grappling Hook	Left Handed	Gold Helmet Stripes	Ion Cannon
Wolffe	Thermal Detonator	Radar Jammer	Right Handed	Red Helmet Stripes	Magnet Trap
Sinker	Blaster Barrage	Grappling Hook	Right Handed	Gold Helmet Stripes	Sonic Whistle
Boost	Thermal Detonator	Grappling Hook	Right Handed	Red Helmet Stripes	Sonic Whistle
Skirata	Force Push	Grappling Hook	Right Handed	Red Helmet Stripes	Magnet Trap
Boil	Jetpack Blast	Cloaking Device	Left Handed	Blue Helmet Stripes	Sonic Whistle
Kano	Jetpack Blast	Grappling Hook	Right Handed	Gold Helmet Stripes	Sonic Whistle
Waxer	Jetpack Blast	EMP Grenade	Right Handed	Blue Helmet Stripes	Magnet Trap
Hardcase	Electro Staff	Smoke Bomb	Left Handed	Gold Helmet Stripes	Sonic Whistle
Odd Ball	Electro Staff	Cloaking Device	Left Handed	Blue Helmet Stripes	Magnet Trap
Dogma	Electro Staff	Cloaking Device	Right Handed	Red Helmet Stripes	Sonic Whistle
Vaughn	Force Push	Cloaking Device	Right Handed	Red Helmet Stripes	Magnet Trap
Broadside	Jetpack Blast	Radar Jammer	Left Handed	Red Helmet Stripes	Ion Cannon
Fox	Force Push	Smoke Bomb	Right Handed	Red Helmet Stripes	Magnet Trap
Fives	Blaster Barrage	EMP Grenade	Right Handed	Gold Helmet Stripes	Ion Cannon
Denal	Thermal Detonator	Radar Jammer	Right Handed	Blue Helmet Stripes	Magnet Trap
Bly	Force Push	EMP Grenade	Right Handed	Gold Helmet Stripes	Magnet Trap

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CLUE 1 Place value

You inspect the security terminal to read the security digits recorded during the break in.

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



What is the value of the 5 in 958? ☐ → T

What is the value of the 4 in 412? ☐ → O

What is the value of the 4 in 4,372? ☐ → B

What is the value of the 8 in 893? ☐ → D

What is the value of the 7 in 7,050? ☐ → H

What is the value of the 5 in 8,510? ☐ → M

What is the value of the 7 in 5,072? ☐ → U

What is the value of the 6 in 692? ☐ → I

What is the value of the 9 in 9,537? ☐ → A

What is the value of the 6 in 9,462? ☐ → N

What is the value of the 8 in 18,537? ☐ → K

What is the value of the 4 in 845? ☐ → S

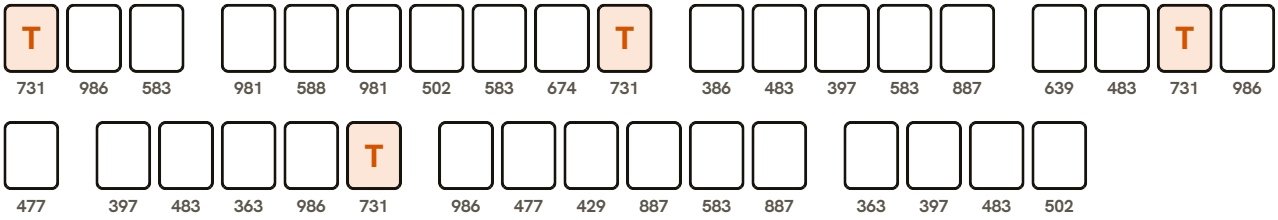
What is the value of the 2 in 52,053? ☐ → E

Scratch space:

CLUE 2 Addition

You gather the spare supply crates left near the hangar and count them up to find more clues.

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



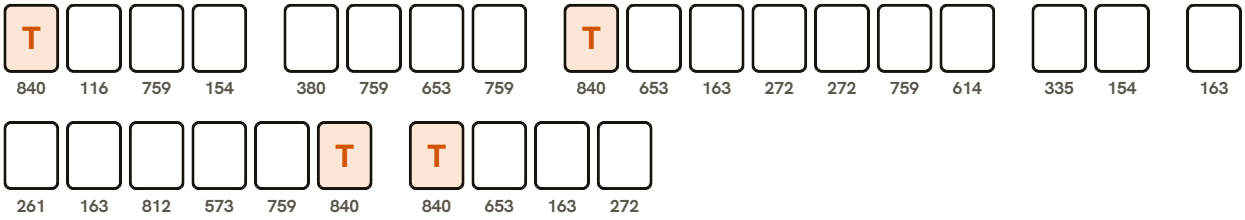
480 + 251 = ☐ → T	290 + 298 = ☐ → U	294 + 687 = ☐ → S
397 + 242 = ☐ → W	291 + 192 = ☐ → I	303 + 199 = ☐ → P
556 + 430 = ☐ → H	326 + 348 = ☐ → C	225 + 252 = ☐ → A
560 + 327 = ☐ → D	277 + 120 = ☐ → R	156 + 230 = ☐ → F
256 + 173 = ☐ → N	293 + 290 = ☐ → E	228 + 135 = ☐ → G

Scratch space:

CLUE 3 Subtraction

You check the power grid logs to see how many energy cells were drained from the generator.

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



960 - 120 = ☐ → T

254 - 100 = ☐ → Y

749 - 135 = ☐ → D

890 - 237 = ☐ → R

293 - 32 = ☐ → M

420 - 85 = ☐ → B

636 - 364 = ☐ → P

893 - 81 = ☐ → G

381 - 1 = ☐ → W

1155 - 396 = ☐ → E

326 - 163 = ☐ → A

211 - 95 = ☐ → H

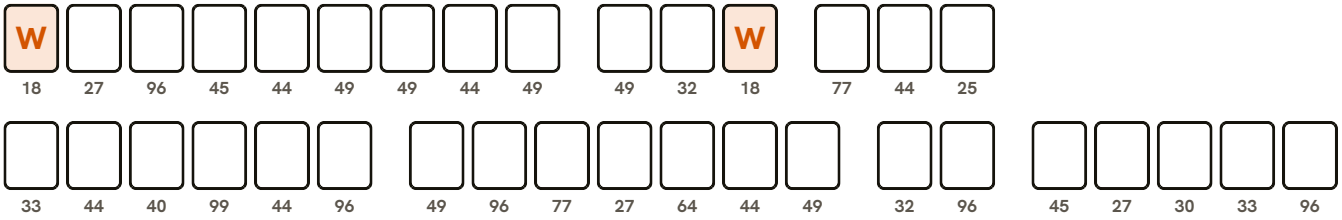
882 - 309 = ☐ → N

Scratch space:

CLUE 4 Multiplication facts (1-12)

> You examine rows of storage lockers in the barracks to track down misplaced evidence.

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



3 × 6 = ☐ → W

7 × 7 = ☐ → S

4 × 11 = ☐ → E

11 × 7 = ☐ → R

12 × 8 = ☐ → T

5 × 6 = ☐ → G

11 × 3 = ☐ → H

5 × 5 = ☐ → D

9 × 11 = ☐ → M

4 × 10 = ☐ → L

9 × 3 = ☐ → I

4 × 8 = ☐ → A

9 × 5 = ☐ → N

8 × 8 = ☐ → P

Scratch space:

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

> You divide the remaining ration packs equally among the troopers on guard duty.

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:

5 ÷ 5 = ☐	35 ÷ 5 = ☐	14 ÷ 7 = ☐	30 ÷ 3 = ☐	45 ÷ 5 = ☐
25 ÷ 5 = ☐	44 ÷ 11 = ☐	48 ÷ 6 = ☐	30 ÷ 10 = ☐	48 ÷ 4 = ☐
33 ÷ 3 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain used a force push, then scrambled away with a grappling hook.
2. The villain used a force push, then activated a cloaking device.
3. The villain launched a jetpack blast, then disappeared behind a smoke bomb.
4. The villain used a force push, then turned on a radar jammer.
5. The villain swung an electro staff, then turned on a radar jammer.
6. The villain threw a thermal detonator, then turned on a radar jammer.
7. The villain threw a thermal detonator, then activated a cloaking device.
8. The villain launched a jetpack blast, then scrambled away with a grappling hook.
9. The villain threw a thermal detonator, then disappeared behind a smoke bomb.
10. The villain launched a jetpack blast, then turned on a radar jammer.
11. The villain used a force push, then disappeared behind a smoke bomb.
12. The villain swung an electro staff, then detonated an emp grenade.

TEACHER / PARENT

Answer Key

The Outpost Sabotage Mystery

Culprit: Wolffe

Thermal Detonator · Radar Jammer · Right Handed · Red Helmet Stripes · Magnet Trap

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAK DID NOT USE A SMOKE BOMB"

What is the value of the 5 in 958? = 50 (T) · What is the value of the 4 in 412? = 400 (O) · What is the value of the 4 in 4,372? = 4000 (B) · What is the value of the 8 in 893? = 800 (D) · What is the value of the 7 in 7,050? = 7000 (H) · What is the value of the 5 in 8,510? = 500 (M) · What is the value of the 7 in 5,072? = 70 (U) · What is the value of the 6 in 692? = 600 (I) · What is the value of the 9 in 9,537? = 9000 (A) · What is the value of the 6 in 9,462? = 60 (N) · What is the value of the 8 in 18,537? = 8000 (K) · What is the value of the 4 in 845? = 40 (S) · What is the value of the 2 in 52,053? = 2000 (E)

Clue 2 (Addition): "THE SUSPECT FIRED WITH A RIGHT HANDED GRIP"

480 + 251 = 731 (T) · 290 + 298 = 588 (U) · 294 + 687 = 981 (S) · 397 + 242 = 639 (W) · 291 + 192 = 483 (I) · 303 + 199 = 502 (P) · 556 + 430 = 986 (H) · 326 + 348 = 674 (C) · 225 + 252 = 477 (A) · 560 + 327 = 887 (D) · 277 + 120 = 397 (R) · 156 + 230 = 386 (F) · 256 + 173 = 429 (N) · 293 + 290 = 583 (E) · 228 + 135 = 363 (G)

Clue 3 (Subtraction): "THEY WERE TRAPPED BY A MAGNET TRAP"

960 - 120 = 840 (T) · 254 - 100 = 154 (Y) · 749 - 135 = 614 (D) · 890 - 237 = 653 (R) · 293 - 32 = 261 (M) · 420 - 85 = 335 (B) · 636 - 364 = 272 (P) · 893 - 81 = 812 (G) · 381 - 1 = 380 (W) · 1155 - 396 = 759 (E) · 326 - 163 = 163 (A) · 211 - 95 = 116 (H) · 882 - 309 = 573 (N)

Clue 4 (Multiplication facts (1-12)): "WITNESSES SAW RED HELMET STRIPES AT NIGHT"

3 × 6 = 18 (W) · 7 × 7 = 49 (S) · 4 × 11 = 44 (E) · 11 × 7 = 77 (R) · 12 × 8 = 96 (T) · 5 × 6 = 30 (G) · 11 × 3 = 33 (H) · 5 × 5 = 25 (D) · 9 × 11 = 99 (M) · 4 × 10 = 40 (L) · 9 × 3 = 27 (I) · 4 × 8 = 32 (A) · 9 × 5 = 45 (N) · 8 × 8 = 64 (P)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Wolffe

5 ÷ 5 = 1 · 35 ÷ 5 = 7 · 14 ÷ 7 = 2 · 30 ÷ 3 = 10 · 45 ÷ 5 = 9 · 25 ÷ 5 = 5 · 44 ÷ 11 = 4 · 48 ÷ 6 = 8 · 30 ÷ 10 = 3 · 48 ÷ 4 = 12 · 33 ÷ 3 = 11