The Crystal Map Mystery

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

Detective: _____ **Date:** _____

A sneaky rogue explorer snuck into the Sunken Temple of Coral Key and snatched the legendary Crystal Map! Clues were left behind on the stone tiles. Help the Explorer Squad gather evidence and catch the villain!

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 Rogue Explorer is _____

Possible suspects

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

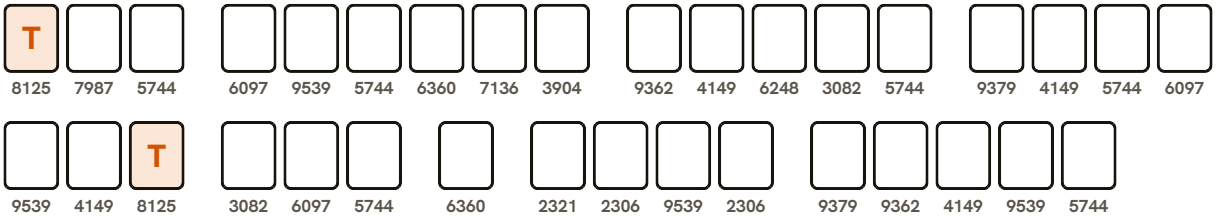
NAME	EXPLORER TOOL	SPECIAL GEAR	GLOVE STYLE	HAIRSTYLE	SECRET WEAKNESS
Nina Swift	grappling hook	jetpack harness	wears left glove	curly buzzcut	sticky net
Elena Cruz	glider wings	underwater boots	wears left glove	curly buzzcut	sticky net
Skye Wild	night goggles	jetpack harness	wears left glove	spiky crewcut	loud whistles
Ruby Vance	smoke bomb	mega magnet	wears right glove	spiky crewcut	loud whistles
Nora Finch	smoke bomb	underwater boots	wears left glove	curly buzzcut	bright flashlights
Piper Gale	smoke bomb	jetpack harness	wears left glove	spiky crewcut	sticky net
Amber Coast	smoke bomb	underwater boots	wears left glove	curly buzzcut	sticky net
Cole Canyon	smoke bomb	mini drone	wears left glove	curly buzzcut	sticky net
Zane Blaze	night goggles	jetpack harness	wears left glove	curly buzzcut	sticky net
Brody Stone	smoke bomb	jetpack harness	wears right glove	spiky crewcut	bright flashlights
Sam Ridge	smoke bomb	mega magnet	wears right glove	curly buzzcut	bright flashlights
Jax Rivers	night goggles	laser torch	wears right glove	curly buzzcut	loud whistles
Cody Reed	night goggles	mini drone	wears left glove	curly buzzcut	loud whistles
Toby Marsh	compass tracker	mega magnet	wears right glove	curly buzzcut	sticky net
Finn Skylar	compass tracker	jetpack harness	wears right glove	braided ponytail	bright flashlights
Tess Drake	smoke bomb	underwater boots	wears right glove	curly buzzcut	sticky net
Kai Sterling	smoke bomb	underwater boots	wears left glove	spiky crewcut	bright flashlights
Hazel Brook	smoke bomb	jetpack harness	wears left glove	spiky crewcut	bright flashlights
Ivy Rhodes	smoke bomb	laser torch	wears left glove	spiky crewcut	sticky net
Milo West	night goggles	laser torch	wears left glove	braided ponytail	sticky net
Dax Horizon	smoke bomb	underwater boots	wears left glove	braided ponytail	sticky net

make your own at mathcrackers.com

CLUE 1 Addition

You combine all the artifact rubbings collected from the temple floor to calculate the total code strength.

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



5259 + 2866 = ☐ → T	6047 + 3315 = ☐ → R	1425 + 2479 = ☐ → Y
2948 + 5039 = ☐ → H	1036 + 2046 = ☐ → U	6230 + 3149 = ☐ → D
2778 + 2966 = ☐ → E	2389 + 1760 = ☐ → O	3587 + 3549 = ☐ → K
6541 + 2998 = ☐ → N	1274 + 1047 = ☐ → M	1392 + 914 = ☐ → I
3669 + 2691 = ☐ → A	3328 + 2920 = ☐ → G	4143 + 1954 = ☐ → S

Scratch space:

CLUE 2 Rounding

The temple sonar scanner gives an estimate of nearby energy readings rounded to the nearest hundred.

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

W									W																					
4300	1100	2300	3700	20	500	500	500	230	4300	230	900	20	5000	2300	300	230	3700	1700	20	1700	500	2300	70	230	2900	2000	3700	2300	300	20	70	1100	430

Round 4,290 to the nearest hundred ☐ → W

Round 19 to the nearest ten ☐ → E

Round 533 to the nearest hundred ☐ → S

Round 902 to the nearest hundred ☐ → L

Round 1,699 to the nearest thousand ☐ → O

Round 226 to the nearest ten ☐ → A

Round 5,254 to the nearest thousand ☐ → F

Round 69 to the nearest ten ☐ → R

Round 316 to the nearest hundred ☐ → H

Round 1,740 to the nearest hundred ☐ → D

Round 3,662 to the nearest hundred ☐ → N

Round 1,133 to the nearest hundred ☐ → I

Round 2,943 to the nearest hundred ☐ → P

Round 431 to the nearest ten ☐ → G

Round 2,258 to the nearest hundred ☐ → T

Scratch space:

CLUE 3 Subtraction

You compare the total number of ancient gold coins against what remains in the vault to find the difference.

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



10097 - 3920 = ☐ → T

6388 - 3273 = ☐ → L

8351 - 1577 = ☐ → D

13010 - 4122 = ☐ → A

7217 - 131 = ☐ → C

7569 - 2903 = ☐ → I

7796 - 4176 = ☐ → G

5008 - 323 = ☐ → V

8509 - 4526 = ☐ → H

5610 - 4069 = ☐ → N

11030 - 4330 = ☐ → E

9779 - 2640 = ☐ → O

12906 - 4284 = ☐ → Y

6891 - 1621 = ☐ → K

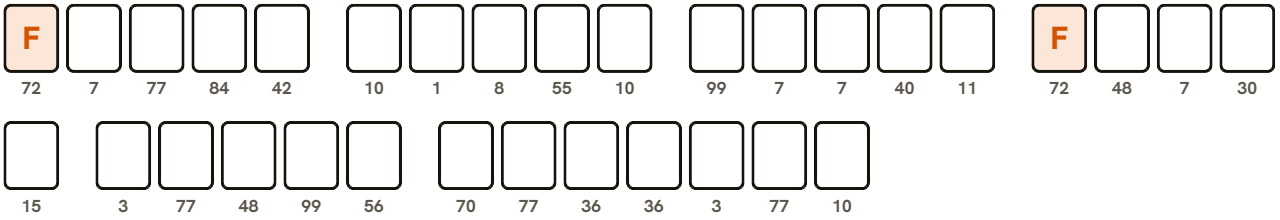
12312 - 3420 = ☐ → S

Scratch space:

CLUE 4 Multiplication facts (1-12)

> You count the carved stone tiles on the wall arranged in neat equal rows and columns.

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



6 × 12 = ☐ → F

12 × 3 = ☐ → Z

12 × 7 = ☐ → N

4 × 12 = ☐ → R

5 × 6 = ☐ → M

7 × 6 = ☐ → D

11 × 1 = ☐ → S

4 × 10 = ☐ → P

3 × 1 = ☐ → C

8 × 7 = ☐ → Y

9 × 11 = ☐ → L

11 × 5 = ☐ → H

7 × 10 = ☐ → B

5 × 3 = ☐ → A

1 × 8 = ☐ → G

2 × 5 = ☐ → T

11 × 7 = ☐ → U

1 × 7 = ☐ → O

1 × 1 = ☐ → I

Scratch space:

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

> You divide the total bundle of explorer ropes equally among your team members before heading inside.

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:

21 ÷ 3 = ☐	33 ÷ 3 = ☐	32 ÷ 4 = ☐	48 ÷ 4 = ☐	20 ÷ 10 = ☐
5 ÷ 5 = ☐	24 ÷ 6 = ☐	9 ÷ 3 = ☐	50 ÷ 10 = ☐	110 ÷ 11 = ☐
42 ÷ 7 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain vanished into thin air using a smoke bomb, then cut through the heavy iron lock with a laser torch.
2. The villain tracked the secret path using a compass tracker, then snatched the golden key using a mega magnet.
3. The villain tracked the secret path using a compass tracker, then cut through the heavy iron lock with a laser torch.
4. The villain swung across the canyon with a grappling hook, then snatched the golden key using a mega magnet.
5. The villain tracked the secret path using a compass tracker, then marched through deep water with underwater boots.
6. The villain navigated the dark cave with night goggles, then scouted ahead using a mini drone.
7. The villain soared over the treetops with glider wings, then marched through deep water with underwater boots.
8. The villain swung across the canyon with a grappling hook, then boosted over walls using a jetpack harness.
9. The villain navigated the dark cave with night goggles, then boosted over walls using a jetpack harness.
10. The villain soared over the treetops with glider wings, then snatched the golden key using a mega magnet.
11. The villain vanished into thin air using a smoke bomb, then marched through deep water with underwater boots.
12. The villain soared over the treetops with glider wings, then scouted ahead using a mini drone.

TEACHER / PARENT

Answer Key

The Crystal Map Mystery

Culprit: Zane Blaze

night goggles · jetpack harness · wears left glove · curly buzzcut · sticky net

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY ROGUE DOES NOT USE A MINI DRONE"

5259 + 2866 = 8125 (T) · 6047 + 3315 = 9362 (R) · 1425 + 2479 = 3904 (Y) · 2948 + 5039 = 7987 (H) · 1036 + 2046 = 3082 (U) · 6230 + 3149 = 9379 (D) · 2778 + 2966 = 5744 (E) · 2389 + 1760 = 4149 (O) · 3587 + 3549 = 7136 (K) · 6541 + 2998 = 9539 (N) · 1274 + 1047 = 2321 (M) · 1392 + 914 = 2306 (I) · 3669 + 2691 = 6360 (A) · 3328 + 2920 = 6248 (G) · 4143 + 1954 = 6097 (S)

Clue 2 (Rounding): "WITNESS SAW A LEFT HANDED STRAP ON THE RIG"

Round 4,290 to the nearest hundred = 4300 (W) · Round 19 to the nearest ten = 20 (E) · Round 533 to the nearest hundred = 500 (S) · Round 902 to the nearest hundred = 900 (L) · Round 1,699 to the nearest thousand = 2000 (O) · Round 226 to the nearest ten = 230 (A) · Round 5,254 to the nearest thousand = 5000 (F) · Round 69 to the nearest ten = 70 (R) · Round 316 to the nearest hundred = 300 (H) · Round 1,740 to the nearest hundred = 1700 (D) · Round 3,662 to the nearest hundred = 3700 (N) · Round 1,133 to the nearest hundred = 1100 (I) · Round 2,943 to the nearest hundred = 2900 (P) · Round 431 to the nearest ten = 430 (G) · Round 2,258 to the nearest hundred = 2300 (T)

Clue 3 (Subtraction): "THE VILLAIN GOT TANGLED IN A STICKY NET"

10097 - 3920 = 6177 (T) · 6388 - 3273 = 3115 (L) · 8351 - 1577 = 6774 (D) · 13010 - 4122 = 8888 (A) · 7217 - 131 = 7086 (C) · 7569 - 2903 = 4666 (I) · 7796 - 4176 = 3620 (G) · 5008 - 323 = 4685 (V) · 8509 - 4526 = 3983 (H) · 5610 - 4069 = 1541 (N) · 11030 - 4330 = 6700 (E) · 9779 - 2640 = 7139 (O) · 12906 - 4284 = 8622 (Y) · 6891 - 1621 = 5270 (K) · 12312 - 3420 = 8892 (S)

Clue 4 (Multiplication facts (1-12)): "FOUND TIGHT LOOPS FROM A CURLY BUZZCUT"

6 × 12 = 72 (F) · 12 × 3 = 36 (Z) · 12 × 7 = 84 (N) · 4 × 12 = 48 (R) · 5 × 6 = 30 (M) · 7 × 6 = 42 (D) · 11 × 1 = 11 (S) · 4 × 10 = 40 (P) · 3 × 1 = 3 (C) · 8 × 7 = 56 (Y) · 9 × 11 = 99 (L) · 11 × 5 = 55 (H) · 7 × 10 = 70 (B) · 5 × 3 = 15 (A) · 1 × 8 = 8 (G) · 2 × 5 = 10 (T) · 11 × 7 = 77 (U) · 1 × 7 = 7 (O) · 1 × 1 = 1 (I)

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

21 ÷ 3 = 7 · 33 ÷ 3 = 11 · 32 ÷ 4 = 8 · 48 ÷ 4 = 12 · 20 ÷ 10 = 2 · 5 ÷ 5 = 1 · 24 ÷ 6 = 4 · 9 ÷ 3 = 3 · 50 ÷ 10 = 5 · 110 ÷ 11 = 10 · 42 ÷ 7 = 6