The Mystery of the Crystal Map

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

Detective: _____ **Date:** _____

A sneaky rival explorer broke into the jungle temple ruins and snatched the ancient crystal map! Use your detective skills and solve math puzzles to narrow down the suspect pool and recover the stolen artifact.

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 Rival Explorer is _____

Possible suspects

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

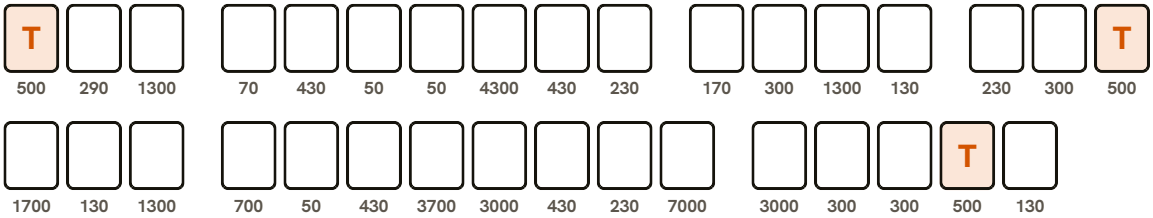
NAME	MAIN TOOL	SECONDARY GADGET	DOMINANT HAND	HAIR COLOR	BIGGEST FEAR
Aria	Pocket Drone	Sonar Whistle	Left Handed	Bright Red Hair	Fear Of Spiders
Mason	Pocket Drone	Sonar Whistle	Left Handed	Bright Red Hair	Fear Of Bats
Kai	Pocket Drone	Zip Line Wheel	Right Handed	Neon Blue Hair	Fear Of Spiders
Ruby	Decoder Ring	Zip Line Wheel	Right Handed	Golden Blonde Hair	Fear Of Bats
Amelia	Decoder Ring	Zip Line Wheel	Right Handed	Neon Blue Hair	Fear Of Spiders
Ivy	Pocket Drone	Zip Line Wheel	Left Handed	Neon Blue Hair	Fear Of Bats
Elena	Grappling Hook	Climbing Boots	Right Handed	Neon Blue Hair	Fear Of Spiders
Maya	Grappling Hook	Sonar Whistle	Left Handed	Neon Blue Hair	Fear Of Snakes
Ella	Grappling Hook	Sonar Whistle	Right Handed	Bright Red Hair	Fear Of Bats
Logan	Decoder Ring	Smoke Pellets	Right Handed	Neon Blue Hair	Fear Of Snakes
Noah	Radar Compass	Glider Pack	Right Handed	Golden Blonde Hair	Fear Of Bats
Lucas	Radar Compass	Sonar Whistle	Right Handed	Neon Blue Hair	Fear Of Spiders
Jack	Pocket Drone	Smoke Pellets	Right Handed	Bright Red Hair	Fear Of Bats
Owen	Decoder Ring	Glider Pack	Right Handed	Bright Red Hair	Fear Of Spiders
Mia	Decoder Ring	Glider Pack	Left Handed	Bright Red Hair	Fear Of Spiders
Ethan	Decoder Ring	Sonar Whistle	Left Handed	Neon Blue Hair	Fear Of Spiders
Wyatt	Grappling Hook	Glider Pack	Left Handed	Neon Blue Hair	Fear Of Bats
Zoe	Radar Compass	Zip Line Wheel	Right Handed	Golden Blonde Hair	Fear Of Bats
Nora	Decoder Ring	Sonar Whistle	Right Handed	Neon Blue Hair	Fear Of Spiders
Caleb	Decoder Ring	Climbing Boots	Left Handed	Bright Red Hair	Fear Of Bats
Chloe	Pocket Drone	Smoke Pellets	Left Handed	Golden Blonde Hair	Fear Of Spiders

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CLUE 1 Rounding

You review the daily camp supplies tally to track down where the rival explorer went next.

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



Round 453 to the nearest hundred ☐ → T

Round 167 to the nearest ten ☐ → D

Round 47 to the nearest ten ☐ → L

Round 3,742 to the nearest hundred ☐ → M

Round 434 to the nearest ten ☐ → I

Round 4,303 to the nearest hundred ☐ → A

Round 293 to the nearest ten ☐ → H

Round 233 to the nearest ten ☐ → N

Round 134 to the nearest ten ☐ → S

Round 7,217 to the nearest thousand ☐ → G

Round 675 to the nearest hundred ☐ → C

Round 1,325 to the nearest hundred ☐ → E

Round 70 to the nearest ten ☐ → V

Round 3,337 to the nearest thousand ☐ → B

Round 254 to the nearest hundred ☐ → O

Round 1,715 to the nearest hundred ☐ → U

Scratch space:

CLUE 2 Word problems

The altar scanner only shows rounded power readings, but it points to a clue.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was

R								D	E	D
75	54	59	11	21	11	43	25			

.

There were 93 carved badge. 18 were used up. How many carved badge are left?

Answer: ____ → R

There were 61 bronze key. 36 were used up. How many bronze key are left?

Answer: ____ → N

There were 97 map scroll. 38 were used up. How many map scroll are left?

Answer: ____ → G

Scout Leader found 3 map scroll yesterday and 8 more today. How many map scroll in all?

Answer: ____ → H

Scout Leader found 14 ruby gem yesterday and 40 more today. How many ruby gem in all?

Answer: ____ → I

Scout Leader found 22 bronze key yesterday and 21 more today. How many bronze key in all?

Answer: ____ → A

Scout Leader lined up 3 rows of 7 ruby gem. How many ruby gem in all?

Answer: ____ → T

Scratch space:

CLUE 3

Addition

You add up all the expedition coins found near the temple steps.

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



5653 + 3067 = ☐ → A

2578 + 5916 = ☐ → E

2070 + 1184 = ☐ → P

1017 + 1150 = ☐ → N

2967 + 2997 = ☐ → S

5167 + 4355 = ☐ → M

1165 + 895 = ☐ → T

1774 + 2416 = ☐ → H

2292 + 1816 = ☐ → C

5400 + 3579 = ☐ → W

2794 + 2662 = ☐ → R

2621 + 1128 = ☐ → Y

2321 + 2965 = ☐ → I

1562 + 2082 = ☐ → L

1889 + 3987 = ☐ → O

1243 + 1462 = ☐ → F

4491 + 2502 = ☐ → D

Scratch space:

CLUE 4 Subtraction

You calculate how many ancient tiles are missing from the floor path.

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



2019 - 516 = ☐ → N

7693 - 2186 = ☐ → H

7669 - 2479 = ☐ → B

8188 - 4402 = ☐ → E

7956 - 3007 = ☐ → F

12475 - 4588 = ☐ → D

9234 - 811 = ☐ → O

8769 - 2886 = ☐ → U

7633 - 3510 = ☐ → S

4223 - 2821 = ☐ → T

2037 - 944 = ☐ → I

6218 - 1662 = ☐ → P

9137 - 877 = ☐ → R

4582 - 1504 = ☐ → M

10581 - 3276 = ☐ → A

5128 - 1636 = ☐ → W

10365 - 4986 = ☐ → L

Scratch space:

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

> You divide the total path markers equally among your scout team to narrow the search area.

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:

121 ÷ 11 = ☐ | 18 ÷ 2 = ☐ | 7 ÷ 1 = ☐ | 132 ÷ 11 = ☐ | 12 ÷ 3 = ☐

8 ÷ 4 = ☐ | 16 ÷ 2 = ☐ | 9 ÷ 3 = ☐ | 60 ÷ 10 = ☐ | 40 ÷ 4 = ☐

11 ÷ 11 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain melted the ancient iron lock with a laser torch, then called for wild help with a sonar whistle.
2. The villain scouted the hallway using a radar compass, then zipped away down the cable on a zip line wheel.
3. The villain scouted the hallway using a radar compass, then vanished into the room using smoke pellets.
4. The villain swung across the pit with a grappling hook, then marched up the stone wall in climbing boots.
5. The villain zipped ahead to spy with a pocket drone, then zipped away down the cable on a zip line wheel.
6. The villain unlocked the secret door with a decoder ring, then vanished into the room using smoke pellets.
7. The villain unlocked the secret door with a decoder ring, then zipped away down the cable on a zip line wheel.
8. The villain swung across the pit with a grappling hook, then zipped away down the cable on a zip line wheel.
9. The villain unlocked the secret door with a decoder ring, then called for wild help with a sonar whistle.
10. The villain zipped ahead to spy with a pocket drone, then vanished into the room using smoke pellets.
11. The villain scouted the hallway using a radar compass, then called for wild help with a sonar whistle.
12. The villain scouted the hallway using a radar compass, then marched up the stone wall in climbing boots.

TEACHER / PARENT

Answer Key

The Mystery of the Crystal Map

Culprit: Kai

Pocket Drone · Zip Line Wheel · Right Handed · Neon Blue Hair · Fear Of Spiders

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

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE CLIMBING BOOTS"

Round 453 to the nearest hundred = 500 (T) · Round 167 to the nearest ten = 170 (D) · Round 47 to the nearest ten = 50 (L) · Round 3,742 to the nearest hundred = 3700 (M) · Round 434 to the nearest ten = 430 (I) · Round 4,303 to the nearest hundred = 4300 (A) · Round 293 to the nearest ten = 290 (H) · Round 233 to the nearest ten = 230 (N) · Round 134 to the nearest ten = 130 (S) · Round 7,217 to the nearest thousand = 7000 (G) · Round 675 to the nearest hundred = 700 (C) · Round 1,325 to the nearest hundred = 1300 (E) · Round 70 to the nearest ten = 70 (V) · Round 3,337 to the nearest thousand = 3000 (B) · Round 254 to the nearest hundred = 300 (O) · Round 1,715 to the nearest hundred = 1700 (U)

Clue 2 (Word problems): "RIGHT HANDED"

There were 93 carved badge. 18 were used up. How many carved badge are left? = 75 (R) · There were 61 bronze key. 36 were used up. How many bronze key are left? = 25 (N) · There were 97 map scroll. 38 were used up. How many map scroll are left? = 59 (G) · Scout Leader found 3 map scroll yesterday and 8 more today. How many map scroll in all? = 11 (H) · Scout Leader found 14 ruby gem yesterday and 40 more today. How many ruby gem in all? = 54 (I) · Scout Leader found 22 bronze key yesterday and 21 more today. How many bronze key in all? = 43 (A) · Scout Leader lined up 3 rows of 7 ruby gem. How many ruby gem in all? = 21 (T)

Clue 3 (Addition): "A TINY SPIDER ON THE WALL SCARED THEM OFF"

5653 + 3067 = 8720 (A) · 2578 + 5916 = 8494 (E) · 2070 + 1184 = 3254 (P) · 1017 + 1150 = 2167 (N) · 2967 + 2997 = 5964 (S) · 5167 + 4355 = 9522 (M) · 1165 + 895 = 2060 (T) · 1774 + 2416 = 4190 (H) · 2292 + 1816 = 4108 (C) · 5400 + 3579 = 8979 (W) · 2794 + 2662 = 5456 (R) · 2621 + 1128 = 3749 (Y) · 2321 + 2965 = 5286 (I) · 1562 + 2082 = 3644 (L) · 1889 + 3987 = 5876 (O) · 1243 + 1462 = 2705 (F) · 4491 + 2502 = 6993 (D)

Clue 4 (Subtraction): "NEON BLUE HAIR WAS LEFT ON THE TEMPLE DOOR"

2019 - 516 = 1503 (N) · 7693 - 2186 = 5507 (H) · 7669 - 2479 = 5190 (B) · 8188 - 4402 = 3786 (E) · 7956 - 3007 = 4949 (F) · 12475 - 4588 = 7887 (D) · 9234 - 811 = 8423 (O) · 8769 - 2886 = 5883 (U) · 7633 - 3510 = 4123 (S) · 4223 - 2821 = 1402 (T) · 2037 - 944 = 1093 (I) · 6218 - 1662 = 4556 (P) · 9137 - 877 = 8260 (R) · 4582 - 1504 = 3078 (M) · 10581 - 3276 = 7305 (A) · 5128 - 1636 = 3492 (W) · 10365 - 4986 = 5379 (L)

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

121 ÷ 11 = 11 · 18 ÷ 2 = 9 · 7 ÷ 1 = 7 · 132 ÷ 11 = 12 · 12 ÷ 3 = 4 · 8 ÷ 4 = 2 · 16 ÷ 2 = 8 · 9 ÷ 3 = 3 · 60 ÷ 10 = 6 · 40 ÷ 4 = 10 · 11 ÷ 11 = 1