The Mystery of the Lost Golden Compass

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

Detective: _____ **Date:** _____

When Chief Explorer Maya lost her golden compass deep in Echo Island, five clues were left behind in the mud and vines. Solve the math puzzles to crack the secret codes and find out who snatched the compass!

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 jungle rogue is _____

Possible suspects

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

NAME	GEAR USED	SECRET TOOL	STANCE	BANDANA COLOR	FEAR
Noah Trail	Brass Whistle	Binoculars	Right Handed	Sunburst Yellow	Wild Bees
Leo Rover	Rope Ladder	Smoke Bomb	Right Handed	Forest Green	Loud Thunder
Owen Cove	Rope Ladder	Smoke Bomb	Left Handed	Crimson Red	Dark Caves
Sam Finder	Grappling Hook	Binoculars	Left Handed	Crimson Red	Wild Bees
Ava Vine	Brass Whistle	Smoke Bomb	Right Handed	Forest Green	Wild Bees
Hugo Wild	Rope Ladder	Pocket Magnet	Right Handed	Crimson Red	Dark Caves
Eli Tracker	Jungle Machete	Glider Pack	Left Handed	Sunburst Yellow	Wild Bees
Nora Moss	Jungle Machete	Glider Pack	Left Handed	Forest Green	Wild Bees
Jack Ridge	Torch Light	Signal Flare	Left Handed	Forest Green	Wild Bees
Mia Scout	Rope Ladder	Binoculars	Right Handed	Sunburst Yellow	Wild Bees
Maya Peak	Jungle Machete	Binoculars	Left Handed	Sunburst Yellow	Dark Caves
Cole Flint	Jungle Machete	Signal Flare	Left Handed	Crimson Red	Wild Bees
Zack Woods	Grappling Hook	Pocket Magnet	Right Handed	Forest Green	Dark Caves
Sora Swift	Jungle Machete	Binoculars	Right Handed	Sunburst Yellow	Loud Thunder
Lily Marsh	Grappling Hook	Smoke Bomb	Left Handed	Forest Green	Wild Bees
Finn River	Brass Whistle	Pocket Magnet	Left Handed	Forest Green	Wild Bees
Toby Dune	Rope Ladder	Glider Pack	Left Handed	Forest Green	Wild Bees
Ruby Cliff	Rope Ladder	Binoculars	Left Handed	Forest Green	Loud Thunder
Ivy Path	Rope Ladder	Smoke Bomb	Left Handed	Sunburst Yellow	Dark Caves
Cleo Palm	Jungle Machete	Signal Flare	Right Handed	Sunburst Yellow	Loud Thunder
Luke Stone	Torch Light	Smoke Bomb	Right Handed	Forest Green	Wild Bees

make your own at mathcrackers.com

CLUE 1 Addition

> We gathered all the lost supply crates along the riverbank and added up our gear total.

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



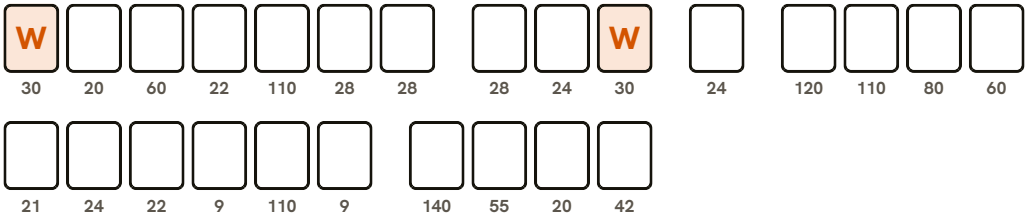
3170 + 2525 = ☐ → T	3358 + 1561 = ☐ → F	2905 + 2934 = ☐ → L
3793 + 2601 = ☐ → H	3383 + 5994 = ☐ → N	3750 + 1842 = ☐ → S
1247 + 2020 = ☐ → R	2447 + 2009 = ☐ → G	1087 + 2035 = ☐ → V
5384 + 3397 = ☐ → D	3791 + 5631 = ☐ → E	3624 + 5127 = ☐ → A
6241 + 3175 = ☐ → U	3990 + 4139 = ☐ → O	1475 + 640 = ☐ → I

Scratch space:

CLUE 2 Skip counting

We counted steps along the stone path by skipping equal numbers of jungle tiles.

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



Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, ___, 35, 40 ☐ → W

Skip-count by 5s. Fill the blank: 5, 10, 15, ___, 25, 30 ☐ → I

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

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → D

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 ☐ → H

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 ☐ → P

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 ☐ → F

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 ☐ → L

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 ☐ → N

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, ___, 27, 30 ☐ → A

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

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

Scratch space:

CLUE 3 Word problems

> The camp log kept track of every scout gear item and total miles hiked on the expedition.

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

Someone scared the villain off with

W							
20	47	23	59	57	35	35	41

.

Scout Leader Sam found 14 trail map yesterday and 6 more today. How many trail map in all?

Answer: ☐ → **W**

There were 64 pith helmet. 7 were used up. How many pith helmet are left?

Answer: ☐ → **B**

Scout Leader Sam found 11 canteen yesterday and 48 more today. How many canteen in all?

Answer: ☐ → **D**

Scout Leader Sam found 16 rope bundle yesterday and 25 more today. How many rope bundle in all?

Answer: ☐ → **S**

There were 76 rope bundle. 29 were used up. How many rope bundle are left?

Answer: ☐ → **I**

There were 66 compass case. 31 were used up. How many compass case are left?

Answer: ☐ → **E**

There were 28 canteen. 5 were used up. How many canteen are left?

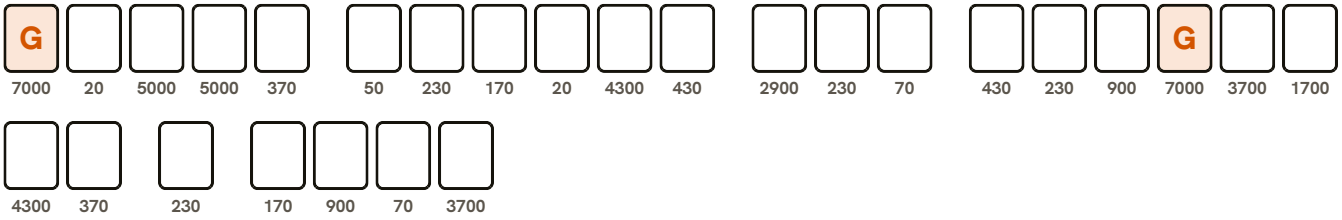
Answer: ☐ → **L**

Scratch space:

CLUE 4 Rounding

Our radio scanner was fuzzy and only showed rounded numbers for the trek distance.

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



Round 7,242 to the nearest thousand ☐ → G

Round 434 to the nearest ten ☐ → C

Round 3,680 to the nearest hundred ☐ → H

Round 4,321 to the nearest hundred ☐ → I

Round 2,921 to the nearest hundred ☐ → W

Round 17 to the nearest ten ☐ → R

Round 174 to the nearest ten ☐ → B

Round 371 to the nearest ten ☐ → N

Round 852 to the nearest hundred ☐ → U

Round 1,671 to the nearest hundred ☐ → T

Round 233 to the nearest ten ☐ → A

Round 73 to the nearest ten ☐ → S

Round 53 to the nearest ten ☐ → F

Round 4,708 to the nearest thousand ☐ → E

Scratch space:

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

> We divided our trail snacks equally into packs for the search teams before heading out.

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:

120 ÷ 12 = ☐	77 ÷ 11 = ☐	24 ÷ 4 = ☐	144 ÷ 12 = ☐	16 ÷ 2 = ☐
16 ÷ 8 = ☐	30 ÷ 10 = ☐	9 ÷ 1 = ☐	48 ÷ 12 = ☐	12 ÷ 12 = ☐
30 ÷ 6 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain climbed up the cliff with a rope ladder, then vanished behind a smoke bomb.
2. The villain lit up the dark tunnel with a torch light, then scouted ahead with binoculars.
3. The villain blew a sharp warning with a brass whistle, then scouted ahead with binoculars.
4. The villain blew a sharp warning with a brass whistle, then fled using a glider pack.
5. The villain lit up the dark tunnel with a torch light, then vanished behind a smoke bomb.
6. The villain blew a sharp warning with a brass whistle, then pulled the key with a pocket magnet.
7. The villain climbed up the cliff with a rope ladder, then fled using a glider pack.
8. The villain lit up the dark tunnel with a torch light, then launched a bright signal flare.
9. The villain chopped through vines with a jungle machete, then launched a bright signal flare.
10. The villain chopped through vines with a jungle machete, then fled using a glider pack.
11. The villain swung across the ravine with a grappling hook, then vanished behind a smoke bomb.
12. The villain chopped through vines with a jungle machete, then pulled the key with a pocket magnet.

TEACHER / PARENT

Answer Key

The Mystery of the Lost Golden Compass

Culprit: Lily Marsh

Grappling Hook · Smoke Bomb · Left Handed · Forest Green · Wild Bees

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DID NOT USE A SIGNAL FLARE"

3170 + 2525 = 5695 (T) · 3358 + 1561 = 4919 (F) · 2905 + 2934 = 5839 (L) · 3793 + 2601 = 6394 (H) · 3383 + 5994 = 9377 (N) · 3750 + 1842 = 5592 (S) · 1247 + 2020 = 3267 (R) · 2447 + 2009 = 4456 (G) · 1087 + 2035 = 3122 (V) · 5384 + 3397 = 8781 (D) · 3791 + 5631 = 9422 (E) · 3624 + 5127 = 8751 (A) · 6241 + 3175 = 9416 (U) · 3990 + 4139 = 8129 (O) · 1475 + 640 = 2115 (I)

Clue 2 (Skip counting): "WITNESS SAW A LEFT HANDED GRIP"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, ___, 35, 40 = 30 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, ___, 25, 30 = 20 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (R) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 = 42 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 = 80 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (L) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 = 22 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, ___, 27, 30 = 24 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 = 110 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, ___, 70, 80 = 60 (T)

Clue 3 (Word problems): "WILD BEES"

Scout Leader Sam found 14 trail map yesterday and 6 more today. How many trail map in all? = 20 (W) · There were 64 pith helmet. 7 were used up. How many pith helmet are left? = 57 (B) · Scout Leader Sam found 11 canteen yesterday and 48 more today. How many canteen in all? = 59 (D) · Scout Leader Sam found 16 rope bundle yesterday and 25 more today. How many rope bundle in all? = 41 (S) · There were 76 rope bundle. 29 were used up. How many rope bundle are left? = 47 (I) · There were 66 compass case. 31 were used up. How many compass case are left? = 35 (E) · There were 28 canteen. 5 were used up. How many canteen are left? = 23 (L)

Clue 4 (Rounding): "GREEN FABRIC WAS CAUGHT IN A BUSH"

Round 7,242 to the nearest thousand = 7000 (G) · Round 434 to the nearest ten = 430 (C) · Round 3,680 to the nearest hundred = 3700 (H) · Round 4,321 to the nearest hundred = 4300 (I) · Round 2,921 to the nearest hundred = 2900 (W) · Round 17 to the nearest ten = 20 (R) · Round 174 to the nearest ten = 170 (B) · Round 371 to the nearest ten = 370 (N) · Round 852 to the nearest hundred = 900 (U) · Round 1,671 to the nearest hundred = 1700 (T) · Round 233 to the nearest ten = 230 (A) · Round 73 to the nearest ten = 70 (S) · Round 53 to the nearest ten = 50 (F) · Round 4,708 to the nearest thousand = 5000 (E)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Lily Marsh

120 ÷ 12 = 10 · 77 ÷ 11 = 7 · 24 ÷ 4 = 6 · 144 ÷ 12 = 12 · 16 ÷ 2 = 8 · 16 ÷ 8 = 2 · 30 ÷ 10 = 3 · 9 ÷ 1 = 9 · 48 ÷ 12 = 4 · 12 ÷ 12 = 1 · 30 ÷ 6 = 5