



The Secret Island Map Caper

Grade 6 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 3-4

Detective: _____ Date: _____

A rogue explorer snuck into our island base camp and snatched the Golden Compass map! The Junior Explorers must track them down before they find the hidden treasure first.

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	ADVENTURE GEAR	ESCAPE TOOL	FOOTPRINT TYPE	HAT STYLE	FEAR
Charles Lindbergh	Climbing Rope	Glider Wings	Clean Sneakers	Safari Cap	Squeaky Bats
Nellie Bly	Spyglass	Mini Scooter	Clean Sneakers	Pith Helmet	Spiky Cacti
Ben Pathfinder	Grappling Hook	Inflatable Raft	Muddy Boots	Pith Helmet	Squeaky Bats
Maya Hunter	Pocket Compass	Inflatable Raft	Muddy Boots	Bandana	Squeaky Bats
Jack Falcon	Climbing Rope	Rocket Boots	Clean Sneakers	Pith Helmet	Spiky Cacti
Roald Amundsen	Grappling Hook	Zipline Pulley	Clean Sneakers	Safari Cap	Spiky Cacti
Lara Croft	Grappling Hook	Inflatable Raft	Clean Sneakers	Bandana	Spiky Cacti
Zoe Ranger	Grappling Hook	Mini Scooter	Clean Sneakers	Safari Cap	Spiky Cacti
Sally Ride	Climbing Rope	Zipline Pulley	Muddy Boots	Safari Cap	Spiky Cacti
Hardy Boy	Spyglass	Glider Wings	Clean Sneakers	Bandana	Wild Monkeys
Allan Quatermain	Metal Detector	Glider Wings	Clean Sneakers	Pith Helmet	Squeaky Bats
Sacagawea	Metal Detector	Zipline Pulley	Clean Sneakers	Safari Cap	Spiky Cacti
Dora Explorer	Spyglass	Rocket Boots	Clean Sneakers	Safari Cap	Spiky Cacti
Leo Wilder	Metal Detector	Rocket Boots	Clean Sneakers	Safari Cap	Spiky Cacti
Nancy Drew	Spyglass	Zipline Pulley	Clean Sneakers	Bandana	Spiky Cacti
Steve Irwin	Grappling Hook	Inflatable Raft	Clean Sneakers	Safari Cap	Spiky Cacti
Indiana Jones	Climbing Rope	Inflatable Raft	Clean Sneakers	Pith Helmet	Wild Monkeys
Amelia Earhart	Pocket Compass	Mini Scooter	Clean Sneakers	Pith Helmet	Squeaky Bats
Ranulph Fiennes	Grappling Hook	Zipline Pulley	Clean Sneakers	Safari Cap	Squeaky Bats
Ibn Battuta	Metal Detector	Zipline Pulley	Clean Sneakers	Pith Helmet	Squeaky Bats
Phileas Fogg	Spyglass	Mini Scooter	Muddy Boots	Bandana	Spiky Cacti

CLUE 1 Place value

The base camp lockbox has a digital keypad. We need to find the value of the tens digit to open it and read the first clue!

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

T			T											T			
6000	600	800	6000	600	50	800	30	8000	2000	800	4000	7000	2000	6000	1000	4000	800
					T				T								
700	2000	70	200	800	6000	900	2000	2000	6000	4000							

What is the value of the 6 in 56,423? → **T**

What is the value of the 7 in 453,171? → **C**

What is the value of the 8 in 468,130? → **D**

What is the value of the 7 in 327,665? → **N**

What is the value of the 8 in 252,865? → **E**

What is the value of the 2 in 92,917? → **O**

What is the value of the 9 in 652,950? → **B**

What is the value of the 5 in 41,756? → **I**

What is the value of the 1 in 631,703? → **U**

What is the value of the 7 in 196,789? → **R**

What is the value of the 3 in 688,234? → **F**

What is the value of the 2 in 393,299? → **K**

What is the value of the 4 in 824,978? → **S**

What is the value of the 6 in 81,627? → **H**

Scratch space:

CLUE 2 Addition

We found two torn scraps of paper with numbers on them. Adding these page numbers together reveals the next location on our map.

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

T			T												T
2225	6797	8474	2225	5237	6294	5212	4704	6797	6294	4252	4704	5212	3856	6797	2225
											T				
9756	4837	8474	6294	9759	8474	5237	5781	5237	5212	4837	2225	9756			

$905 + 1320 = \square \rightarrow \text{T}$	$1183 + 2673 = \square \rightarrow \text{G}$	$1638 + 3599 = \square \rightarrow \text{R}$
$2468 + 3313 = \square \rightarrow \text{P}$	$2953 + 1751 = \square \rightarrow \text{L}$	$1872 + 3340 = \square \rightarrow \text{I}$
$4527 + 5232 = \square \rightarrow \text{K}$	$3685 + 4789 = \square \rightarrow \text{E}$	$2853 + 1399 = \square \rightarrow \text{D}$
$6567 + 3189 = \square \rightarrow \text{S}$	$2868 + 3426 = \square \rightarrow \text{A}$	$2064 + 2773 = \square \rightarrow \text{N}$
$3430 + 3367 = \square \rightarrow \text{H}$		

Scratch space:

CLUE 3
Subtraction

Our canteen water is dropping fast. Subtracting the leaked water from our starting total gives us the secret code to open the cave door.

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

T 8665	8759	7422	T 8665	8759	8394	7422	1085	1607	1122	7457	8394	1398	7422	1398	T 8665	8759	7422
7055	6439	8394	2010	7625	4746	1607	4746	T 8665	8394								

$10386 - 1721 = \square \rightarrow \text{[T]}$

$5660 - 4538 = \square \rightarrow \text{[V]}$

$9802 - 1043 = \square \rightarrow \text{[H]}$

$11524 - 4469 = \square \rightarrow \text{[S]}$

$6980 - 541 = \square \rightarrow \text{[P]}$

$8638 - 1181 = \square \rightarrow \text{[O]}$

$3361 - 1963 = \square \rightarrow \text{[D]}$

$5039 - 3954 = \square \rightarrow \text{[F]}$

$10205 - 1811 = \square \rightarrow \text{[I]}$

$4803 - 57 = \square \rightarrow \text{[C]}$

$10472 - 2847 = \square \rightarrow \text{[Y]}$

$6102 - 4495 = \square \rightarrow \text{[A]}$

$7581 - 159 = \square \rightarrow \text{[E]}$

$4582 - 2572 = \square \rightarrow \text{[K]}$

Scratch space:

CLUE 4 Skip counting

The stone steps in the temple are numbered in a pattern. Skip counting by fives helps us skip the trap doors and find the hidden note.

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

W																	
18	10	24	80	33	30	14	60	42	80	90	30	45	60	24	60	90	21
26	60	35															

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 → **W**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **F**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **I**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **A**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 → **R**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **E**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **O**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **P**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **C**

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **N**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 → **U**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **D**

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

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

Scratch space:

CLUE 5**Missing addends - the last clue**

To balance the ancient stone scale, we need to find the missing weight. Solving this puzzle opens the secret compartment containing the last clue.

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:

$22 + \underline{\quad} = 25$

$16 + \underline{\quad} = 26$

$40 + \underline{\quad} = 44$

$37 + \underline{\quad} = 46$

$17 + \underline{\quad} = 22$

$35 + \underline{\quad} = 37$

$15 + \underline{\quad} = 16$

$21 + \underline{\quad} = 27$

$18 + \underline{\quad} = 29$

$22 + \underline{\quad} = 34$

$28 + \underline{\quad} = 35$

Step 2 - cross out the sentence with each answer:

1. The villain searched the sand with a metal detector, then soared away on glider wings.
2. The villain scaled the stone wall with a climbing rope, then zoomed down the dirt path on a mini scooter.
3. The villain swung across the canyon using a grappling hook, then escaped down the wire with a zipline pulley.
4. The villain searched the sand with a metal detector, then escaped down the wire with a zipline pulley.
5. The villain scanned the horizon with a spyglass, then soared away on glider wings.
6. The villain swung across the canyon using a grappling hook, then blasted over the trees using rocket boots.
7. The villain scaled the stone wall with a climbing rope, then paddled down the river in an inflatable raft.
8. The villain swung across the canyon using a grappling hook, then paddled down the river in an inflatable raft.
9. The villain scanned the horizon with a spyglass, then paddled down the river in an inflatable raft.
10. The villain swung across the canyon using a grappling hook, then zoomed down the dirt path on a mini scooter.
11. The villain scaled the stone wall with a climbing rope, then blasted over the trees using rocket boots.
12. The villain searched the sand with a metal detector, then zoomed down the dirt path on a mini scooter.

Answer Key

The Secret Island Map Caper

Culprit: Steve Irwin

Grappling Hook · Inflatable Raft · Clean Sneakers · Safari Cap · Spiky Cacti

Trail: Start 21 → Clue 1 18 → Clue 2 14 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT USE ROCKET BOOTS"

What is the value of the 6 in 56,423? = 6000 (T) · What is the value of the 7 in 453,171? = 70 (C) · What is the value of the 8 in 468,130? = 8000 (D) · What is the value of the 7 in 327,665? = 7000 (N) · What is the value of the 8 in 252,865? = 800 (E) · What is the value of the 2 in 92,917? = 2000 (O) · What is the value of the 9 in 652,950? = 900 (B) · What is the value of the 5 in 41,756? = 50 (I) · What is the value of the 1 in 631,703? = 1000 (U) · What is the value of the 7 in 196,789? = 700 (R) · What is the value of the 3 in 688,234? = 30 (F) · What is the value of the 2 in 393,299? = 200 (K) · What is the value of the 4 in 824,978? = 4000 (S) · What is the value of the 6 in 81,627? = 600 (H)

Clue 2 (Addition): "THE TRAIL HAD LIGHT SNEAKER PRINTS"

$905 + 1320 = 2225$ (T) · $1183 + 2673 = 3856$ (G) · $1638 + 3599 = 5237$ (R) · $2468 + 3313 = 5781$ (P) · $2953 + 1751 = 4704$ (L) · $1872 + 3340 = 5212$ (I) · $4527 + 5232 = 9759$ (K) · $3685 + 4789 = 8474$ (E) · $2853 + 1399 = 4252$ (D) · $6567 + 3189 = 9756$ (S) · $2868 + 3426 = 6294$ (A) · $2064 + 2773 = 4837$ (N) · $3430 + 3367 = 6797$ (H)

Clue 3 (Subtraction): "THE THIEF AVOIDED THE SPIKY CACTI"

$10386 - 1721 = 8665$ (T) · $5660 - 4538 = 1122$ (V) · $9802 - 1043 = 8759$ (H) · $11524 - 4469 = 7055$ (S) · $6980 - 541 = 6439$ (P) · $8638 - 1181 = 7457$ (O) · $3361 - 1963 = 1398$ (D) · $5039 - 3954 = 1085$ (F) · $10205 - 1811 = 8394$ (I) · $4803 - 57 = 4746$ (C) · $10472 - 2847 = 7625$ (Y) · $6102 - 4495 = 1607$ (A) · $7581 - 159 = 7422$ (E) · $4582 - 2572 = 2010$ (K)

Clue 4 (Skip counting): "WE FOUND A TORN SAFARI CAP"

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

Clue 5 (Missing addends): surviving statement is box 8 → Steve Irwin

$22 + \underline{\quad} = 25 = 3$ · $16 + \underline{\quad} = 26 = 10$ · $40 + \underline{\quad} = 44 = 4$ · $37 + \underline{\quad} = 46 = 9$ · $17 + \underline{\quad} = 22 = 5$ · $35 + \underline{\quad} = 37 = 2$ · $15 + \underline{\quad} = 16 = 1$ · $21 + \underline{\quad} = 27 = 6$ · $18 + \underline{\quad} = 29 = 11$ · $22 + \underline{\quad} = 34 = 12$ · $28 + \underline{\quad} = 35 = 7$