Mystery of Sunken Castle Island

Grade 4 math · Place value, Addition, Subtraction, Skip counting, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone snuck into camp and stole the ancient island map! You must check the clues and find out who did it.

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 Crystal Sneak is _____

Possible suspects

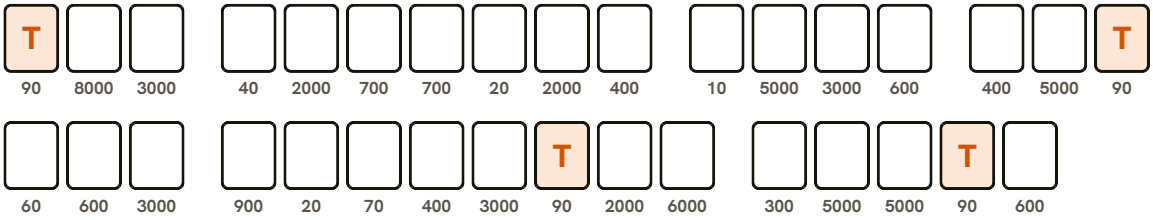
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	PRIMARY GEAR	BACKUP TOOL	DOMINANT HAND	HAIR COLOR	STOPPING ITEM
Scout Owen	rope launcher	signal flare	left handed	jet black	sticky sap
Scout Penny	glider wings	smoke bombs	left handed	bright orange	sea salt spray
Pilot Jack	brass telescope	signal flare	right handed	bright orange	sticky sap
Diver Zoe	golden compass	magnetic boots	left handed	jet black	sea salt spray
Ranger Ella	glider wings	signal flare	right handed	jet black	sea salt spray
Officer Dan	golden compass	smoke bombs	left handed	bright orange	sea salt spray
Ranger Sam	brass telescope	smoke bombs	right handed	bright orange	sea salt spray
Sailor Eli	golden compass	mini drone	left handed	jet black	sticky sap
Pioneer Isla	glider wings	signal flare	left handed	neon green	sticky sap
Pioneer Lily	brass telescope	signal flare	right handed	neon green	sea salt spray
Climber Max	brass telescope	bright flashlight	right handed	bright orange	sea salt spray
Navigator Maya	golden compass	mini drone	left handed	bright orange	sticky sap
Surveyor Noah	golden compass	magnetic boots	left handed	jet black	loud whistle
Tracker Luke	brass telescope	smoke bombs	right handed	jet black	loud whistle
Hiker Grace	brass telescope	mini drone	right handed	bright orange	sea salt spray
Captain Barnaby	brass telescope	smoke bombs	left handed	jet black	sticky sap
Trail Guide Ben	rope launcher	signal flare	right handed	neon green	sea salt spray
Pilot Cole	golden compass	signal flare	left handed	bright orange	sea salt spray
Wayfinder Mia	rope launcher	signal flare	right handed	bright orange	sticky sap
Hiker Chloe	brass telescope	magnetic boots	right handed	bright orange	sea salt spray
Tracker Ruby	glider wings	bright flashlight	right handed	bright orange	sea salt spray

CLUE 1 Place value

You find a locked box on the beach. Look at the numbers on the lock to open it.

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



What is the value of the 9 in 190? ☐ → T

What is the value of the 6 in 165? ☐ → U

What is the value of the 2 in 42,145? ☐ → I

What is the value of the 2 in 923? ☐ → A

What is the value of the 4 in 430? ☐ → N

What is the value of the 7 in 754? ☐ → L

What is the value of the 4 in 2,140? ☐ → V

What is the value of the 3 in 3,277? ☐ → E

What is the value of the 3 in 374? ☐ → B

What is the value of the 6 in 9,682? ☐ → S

What is the value of the 7 in 372? ☐ → G

What is the value of the 8 in 38,615? ☐ → H

What is the value of the 5 in 5,629? ☐ → O

What is the value of the 6 in 6,075? ☐ → C

What is the value of the 1 in 2,512? ☐ → D

What is the value of the 9 in 1,982? ☐ → M

Scratch space:

CLUE 2

Addition

You check the camp supplies. Count the extra gear to see what was stolen.

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



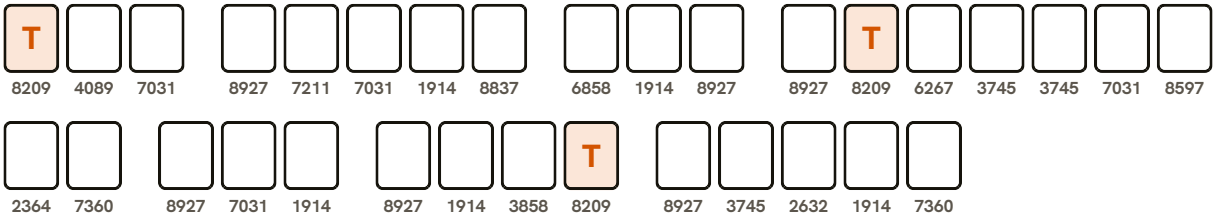
2796 + 3438 = ☐ → P	5401 + 4266 = ☐ → G	1443 + 1413 = ☐ → L
5482 + 3425 = ☐ → I	1815 + 4234 = ☐ → R	4265 + 2733 = ☐ → V
2797 + 5902 = ☐ → S	1700 + 3868 = ☐ → E	2910 + 1750 = ☐ → T
1889 + 2818 = ☐ → H	1668 + 2913 = ☐ → W	3748 + 5451 = ☐ → O
1362 + 1709 = ☐ → A	1221 + 1596 = ☐ → D	2203 + 1767 = ☐ → N

Scratch space:

CLUE 3 Subtraction

You find footprints in the mud. Subtract the old steps to track the thief.

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



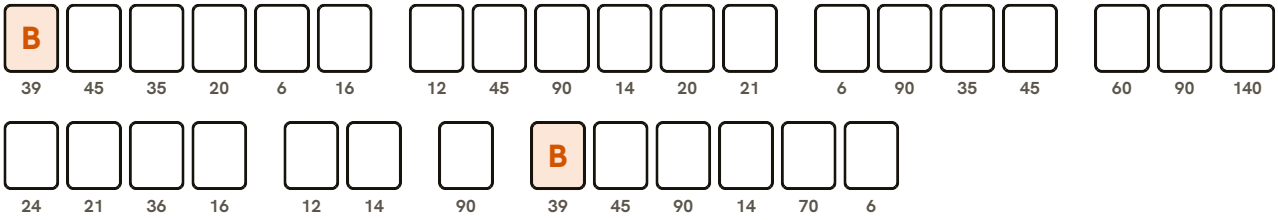
11489 - 3280 = ☐ → T	3955 - 97 = ☐ → L	8355 - 4610 = ☐ → P
3916 - 2002 = ☐ → A	5956 - 1867 = ☐ → H	6398 - 131 = ☐ → O
10970 - 3939 = ☐ → E	4489 - 2125 = ☐ → B	7406 - 46 = ☐ → Y
8772 - 1914 = ☐ → W	10309 - 1472 = ☐ → K	9363 - 766 = ☐ → D
9196 - 269 = ☐ → S	11601 - 4390 = ☐ → N	5257 - 2625 = ☐ → R

Scratch space:

CLUE 4 Skip counting

You spot trail signs on trees. Skip count the painted dots to follow the path.

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



Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 ☐ → B

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 ☐ → C

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → R

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

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → H

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 ☐ → O

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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 ☐ → **F**

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

Scratch space:

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

You divide the clue cards with your team. Share them equally to solve the puzzle.

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:

11 ÷ 11 = ☐	77 ÷ 11 = ☐	70 ÷ 7 = ☐	99 ÷ 11 = ☐	55 ÷ 11 = ☐
108 ÷ 9 = ☐	66 ÷ 11 = ☐	110 ÷ 10 = ☐	4 ÷ 1 = ☐	24 ÷ 12 = ☐
16 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain spied on the camp with a brass telescope, then scouted ahead using a mini drone.
2. The villain blocked the doorway with a heavy shield, then scouted ahead using a mini drone.
3. The villain spied on the camp with a brass telescope, then lit up the trail with a bright flashlight.
4. The villain swung across the canyon with a rope launcher, then marched up the metal wall with magnetic boots.
5. The villain swung across the canyon with a rope launcher, then lit up the trail with a bright flashlight.
6. The villain soared off the cliff with glider wings, then marked the exit with a signal flare.
7. The villain spied on the camp with a brass telescope, then vanished behind dark smoke bombs.
8. The villain swung across the canyon with a rope launcher, then vanished behind dark smoke bombs.
9. The villain soared off the cliff with glider wings, then scouted ahead using a mini drone.
10. The villain soared off the cliff with glider wings, then lit up the trail with a bright flashlight.
11. The villain soared off the cliff with glider wings, then vanished behind dark smoke bombs.
12. The villain swung across the canyon with a rope launcher, then scouted ahead using a mini drone.

TEACHER / PARENT

Answer Key

Mystery of Sunken Castle Island

Culprit: Climber Max

brass telescope · bright flashlight · right handed · bright orange · sea salt spray

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE MAGNETIC BOOTS"

What is the value of the 9 in 190? = 90 (T) · What is the value of the 6 in 165? = 60 (U) · What is the value of the 2 in 42,145? = 2000 (I) · What is the value of the 2 in 923? = 20 (A) · What is the value of the 4 in 430? = 400 (N) · What is the value of the 7 in 754? = 700 (L) · What is the value of the 4 in 2,140? = 40 (V) · What is the value of the 3 in 3,277? = 3000 (E) · What is the value of the 3 in 374? = 300 (B) · What is the value of the 6 in 9,682? = 600 (S) · What is the value of the 7 in 372? = 70 (G) · What is the value of the 8 in 38,615? = 8000 (H) · What is the value of the 5 in 5,629? = 5000 (O) · What is the value of the 6 in 6,075? = 6000 (C) · What is the value of the 1 in 2,512? = 10 (D) · What is the value of the 9 in 1,982? = 900 (M)

Clue 2 (Addition): "PRINTS SHOW THE VILLAIN WAS RIGHT HANDED"

2796 + 3438 = 6234 (P) · 5401 + 4266 = 9667 (G) · 1443 + 1413 = 2856 (L) · 5482 + 3425 = 8907 (I) · 1815 + 4234 = 6049 (R) · 4265 + 2733 = 6998 (V) · 2797 + 5902 = 8699 (S) · 1700 + 3868 = 5568 (E) · 2910 + 1750 = 4660 (T) · 1889 + 2818 = 4707 (H) · 1668 + 2913 = 4581 (W) · 3748 + 5451 = 9199 (O) · 1362 + 1709 = 3071 (A) · 1221 + 1596 = 2817 (D) · 2203 + 1767 = 3970 (N)

Clue 3 (Subtraction): "THE SNEAK WAS STOPPED BY SEA SALT SPRAY"

11489 - 3280 = 8209 (T) · 3955 - 97 = 3858 (L) · 8355 - 4610 = 3745 (P) · 3916 - 2002 = 1914 (A) · 5956 - 1867 = 4089 (H) · 6398 - 131 = 6267 (O) · 10970 - 3939 = 7031 (E) · 4489 - 2125 = 2364 (B) · 7406 - 46 = 7360 (Y) · 8772 - 1914 = 6858 (W) · 10309 - 1472 = 8837 (K) · 9363 - 766 = 8597 (D) · 9196 - 269 = 8927 (S) · 11601 - 4390 = 7211 (N) · 5257 - 2625 = 2632 (R)

Clue 4 (Skip counting): "BRIGHT ORANGE HAIR WAS LEFT ON A BRANCH"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 = 39 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 = 70 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, ___, 26, 28 = 24 (L) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 = 16 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 = 12 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, ___, 22, 24 = 20 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, ___, 70, 80 = 60 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Climber Max

11 ÷ 11 = 1 · 77 ÷ 11 = 7 · 70 ÷ 7 = 10 · 99 ÷ 11 = 9 · 55 ÷ 11 = 5 · 108 ÷ 9 = 12 · 66 ÷ 11 = 6 · 110 ÷ 10 = 11 · 4 ÷ 1 = 4 · 24 ÷ 12 = 2 · 16 ÷ 2 = 8