



The Mystery of the Sunken Temple

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

Detective: _____ Date: _____

Someone snuck into the camp, opened the vault, and took the ancient golden compass! As the junior detective on the expedition team, you must use math clues and field notes to figure out which suspect took 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 temple bandit is _____

Possible suspects

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

NAME	MAIN GEAR	SPECIAL TOOL	DOMINANT HAND	HAIR COLOR	WEAKNESS
Jack Mercer	Grappling Hook	Map Case	Right Handed	Blonde Hair	Water Sprays
Noah Wilder	Grappling Hook	Brass Compass	Right Handed	Red Hair	Bright Flashlights
Nora Frost	Grappling Hook	Pocket Radio	Left Handed	Dark Hair	Water Sprays
Ivy Quinn	Smoke Grenade	Signal Flare	Left Handed	Blonde Hair	Loud Whistles
Lucas Drake	Smoke Grenade	Pocket Radio	Left Handed	Dark Hair	Loud Whistles
Sam Rivera	Laser Torch	Signal Flare	Right Handed	Red Hair	Loud Whistles
Chloe Brooks	Laser Torch	Gold Spyglass	Right Handed	Blonde Hair	Water Sprays
Aria Bell	Rope Launcher	Brass Compass	Right Handed	Red Hair	Bright Flashlights
Liam Stone	Grappling Hook	Brass Compass	Right Handed	Blonde Hair	Bright Flashlights
Caleb Hayes	Laser Torch	Brass Compass	Left Handed	Blonde Hair	Loud Whistles
Maya Lin	Laser Torch	Map Case	Right Handed	Dark Hair	Bright Flashlights
Ethan Hunt	Laser Torch	Brass Compass	Left Handed	Red Hair	Water Sprays
Finn Connor	Smoke Grenade	Brass Compass	Right Handed	Red Hair	Loud Whistles
Mason Reed	Glider Pack	Pocket Radio	Right Handed	Blonde Hair	Loud Whistles
Mia Zhang	Glider Pack	Brass Compass	Left Handed	Dark Hair	Bright Flashlights
Ruby Vance	Smoke Grenade	Map Case	Right Handed	Red Hair	Water Sprays
Owen West	Grappling Hook	Map Case	Left Handed	Red Hair	Loud Whistles
Zoe Chen	Glider Pack	Pocket Radio	Left Handed	Dark Hair	Water Sprays
Ella Vance	Laser Torch	Gold Spyglass	Right Handed	Red Hair	Loud Whistles
Sofia Cruz	Grappling Hook	Map Case	Right Handed	Red Hair	Loud Whistles
Grace Park	Laser Torch	Brass Compass	Right Handed	Red Hair	Loud Whistles

CLUE 1

Subtraction

You check the gear log to see how many supplies remain after the raid.

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

T																T
5777	8415	1049	6574	1004	2283	2283	6402	1004	7809	8645	7400	1049	3251	7809	7400	5777

3107	3251	1049	6402	3251	1004	5567	7809	6402	2283	6919	2283	6402	1088	1049

$10010 - 4233 = \boxed{} \rightarrow \boxed{\text{T}}$

$4584 - 3496 = \boxed{} \rightarrow \boxed{\text{R}}$

$10933 - 2288 = \boxed{} \rightarrow \boxed{\text{D}}$

$6432 - 865 = \boxed{} \rightarrow \boxed{\text{G}}$

$5344 - 2237 = \boxed{} \rightarrow \boxed{\text{U}}$

$6680 - 4397 = \boxed{} \rightarrow \boxed{\text{L}}$

$7228 - 826 = \boxed{} \rightarrow \boxed{\text{A}}$

$10283 - 3709 = \boxed{} \rightarrow \boxed{\text{V}}$

$7405 - 486 = \boxed{} \rightarrow \boxed{\text{F}}$

$12978 - 4563 = \boxed{} \rightarrow \boxed{\text{H}}$

$12617 - 4808 = \boxed{} \rightarrow \boxed{\text{N}}$

$7645 - 245 = \boxed{} \rightarrow \boxed{\text{O}}$

$4830 - 1579 = \boxed{} \rightarrow \boxed{\text{S}}$

$5446 - 4397 = \boxed{} \rightarrow \boxed{\text{E}}$

$3694 - 2690 = \boxed{} \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 2

Addition

You add up all the trail markers found around the temple base.

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

W									W						
7722	4187	2197	5210	2824	5486	5486	5486	9236	7722	9236	5832	4187	8135	5319	2197

5319	9236	5210	4876	2824	4876	8437	4187	2953	2953	9236	4187	5210

$4182 + 3540 = \square \rightarrow \boxed{\text{W}}$

$1598 + 3278 = \square \rightarrow \boxed{\text{D}}$

$2770 + 3062 = \square \rightarrow \boxed{\text{R}}$

$1842 + 1111 = \square \rightarrow \boxed{\text{L}}$

$3050 + 2269 = \square \rightarrow \boxed{\text{H}}$

$3495 + 1991 = \square \rightarrow \boxed{\text{S}}$

$1296 + 2891 = \square \rightarrow \boxed{\text{I}}$

$6186 + 3050 = \square \rightarrow \boxed{\text{A}}$

$4059 + 4378 = \square \rightarrow \boxed{\text{V}}$

$5060 + 3075 = \square \rightarrow \boxed{\text{G}}$

$1005 + 1192 = \square \rightarrow \boxed{\text{T}}$

$1559 + 1265 = \square \rightarrow \boxed{\text{E}}$

$2820 + 2390 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3

Word problems

You solve the mystery notes left behind by the cartographer.

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

Someone scared the villain off with

L							S	T	L	E	S
17	52	27	31	10	8	42			17		

Lead scout found 10 map scrolls yesterday and 7 more today. How many map scrolls in all?

Answer: → **L**

Lead scout found 6 compass cases yesterday and 2 more today. How many compass cases in all?

Answer: → **H**

Lead scout found 6 climbing ropes yesterday and 4 more today. How many climbing ropes in all?

Answer: → **W**

Lead scout found 5 map scrolls yesterday and 47 more today. How many map scrolls in all?

Answer: → **O**

There were 53 ration bars. 22 were used up. How many ration bars are left?

Answer: → **D**

Lead scout found 13 map scrolls yesterday and 14 more today. How many map scrolls in all?

Answer: → **U**

Lead scout lined up 6 rows of 7 map scrolls. How many map scrolls in all?

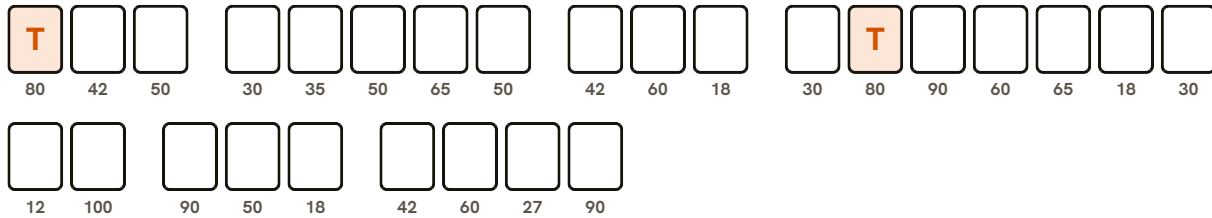
Answer: → **I**

Scratch space:

CLUE 4 Skip counting

You count the torch markers spaced evenly along the tunnel wall.

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



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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 → **I**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **N**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **F**

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

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

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

Scratch space:

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

You divide the recovered energy crystals equally among the team packs.

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:

$22 \div 2 = \boxed{}$

$8 \div 4 = \boxed{}$

$7 \div 1 = \boxed{}$

$54 \div 6 = \boxed{}$

$27 \div 9 = \boxed{}$

$55 \div 11 = \boxed{}$

$36 \div 3 = \boxed{}$

$42 \div 7 = \boxed{}$

$80 \div 10 = \boxed{}$

$36 \div 9 = \boxed{}$

$6 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain scaled walls with a rope launcher, then checked the path with a brass compass.
2. The villain escaped using a smoke grenade, then checked the path with a brass compass.
3. The villain soared away on a glider pack, then listened for guards on a pocket radio.
4. The villain escaped using a smoke grenade, then listened for guards on a pocket radio.
5. The villain escaped using a smoke grenade, then marked the route with a signal flare.
6. The villain soared away on a glider pack, then stashed the plans inside a map case.
7. The villain swung with a grappling hook, then stashed the plans inside a map case.
8. The villain escaped using a smoke grenade, then scouted ahead using a gold spyglass.
9. The villain soared away on a glider pack, then checked the path with a brass compass.
10. The villain cut through locks with a laser torch, then checked the path with a brass compass.
11. The villain cut through locks with a laser torch, then scouted ahead using a gold spyglass.
12. The villain scaled walls with a rope launcher, then listened for guards on a pocket radio.

Answer Key

The Mystery of the Sunken Temple

Culprit: Grace Park

Laser Torch · Brass Compass · Right Handed · Red Hair · Loud Whistles

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

Clue 1 (Subtraction): "THE VILLAIN DOES NOT USE A SIGNAL FLARE"

$10010 - 4233 = 5777$ (T) · $4584 - 3496 = 1088$ (R) · $10933 - 2288 = 8645$ (D) · $6432 - 865 = 5567$ (G) · $5344 - 2237 = 3107$ (U) · $6680 - 4397 = 2283$ (L) · $7228 - 826 = 6402$ (A) · $10283 - 3709 = 6574$ (V) · $7405 - 486 = 6919$ (F) · $12978 - 4563 = 8415$ (H) · $12617 - 4808 = 7809$ (N) · $7645 - 245 = 7400$ (O) · $4830 - 1579 = 3251$ (S) · $5446 - 4397 = 1049$ (E) · $3694 - 2690 = 1004$ (I)

Clue 2 (Addition): "WITNESS SAW A RIGHT HANDED VILLAIN"

$4182 + 3540 = 7722$ (W) · $1598 + 3278 = 4876$ (D) · $2770 + 3062 = 5832$ (R) · $1842 + 1111 = 2953$ (L) · $3050 + 2269 = 5319$ (H) · $3495 + 1991 = 5486$ (S) · $1296 + 2891 = 4187$ (I) · $6186 + 3050 = 9236$ (A) · $4059 + 4378 = 8437$ (V) · $5060 + 3075 = 8135$ (G) · $1005 + 1192 = 2197$ (T) · $1559 + 1265 = 2824$ (E) · $2820 + 2390 = 5210$ (N)

Clue 3 (Word problems): "LOUD WHISTLES"

Lead scout found 10 map scrolls yesterday and 7 more today. How many map scrolls in all? = 17 (L) · Lead scout found 6 compass cases yesterday and 2 more today. How many compass cases in all? = 8 (H) · Lead scout found 6 climbing ropes yesterday and 4 more today. How many climbing ropes in all? = 10 (W) · Lead scout found 5 map scrolls yesterday and 47 more today. How many map scrolls in all? = 52 (O) · There were 53 ration bars. 22 were used up. How many ration bars are left? = 31 (D) · Lead scout found 13 map scrolls yesterday and 14 more today. How many map scrolls in all? = 27 (U) · Lead scout lined up 6 rows of 7 map scrolls. How many map scrolls in all? = 42 (I)

Clue 4 (Skip counting): "THE SCENE HAD STRANDS OF RED HAIR"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 = 30 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (E)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Grace Park

$22 \div 2 = 11$ · $8 \div 4 = 2$ · $7 \div 1 = 7$ · $54 \div 6 = 9$ · $27 \div 9 = 3$ · $55 \div 11 = 5$ · $36 \div 3 = 12$ · $42 \div 7 = 6$ · $80 \div 10 = 8$ · $36 \div 9 = 4$ · $6 \div 6 = 1$