



The Mystery of the Sunstone Compass

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

Detective: _____ Date: _____

Someone swiped the ancient Sunstone Compass right out of the excavation tent! Detective, decode the clues and solve the math to unmask the guilty raider.

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 Raider is _____

Possible suspects

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

NAME	GADGET	VEHICLE	STANCE	HAT COLOR	TRAP
Daring Dan	Grapple Hook	Jungle Quad	Right Handed	Red Bandana	Banana Peel
Voyager Vinny	Glider Wing	Speedboat	Left Handed	Brown Fedora	Net Trap
Rover Ray	Flashlight	Jungle Quad	Right Handed	Pith Helmet	Net Trap
Ranger Rob	Smoke Bomb	Speedboat	Right Handed	Red Bandana	Sticky Glue
Safari Sue	Glider Wing	Hover Raft	Right Handed	Red Bandana	Net Trap
Scout Sarah	Sonic Whistle	Mud Buggy	Right Handed	Red Bandana	Net Trap
Trailblazer Tess	Glider Wing	Mini Helicopter	Right Handed	Red Bandana	Net Trap
Indiana Sam	Grapple Hook	Jungle Quad	Left Handed	Pith Helmet	Net Trap
Navigator Ned	Smoke Bomb	Mini Helicopter	Right Handed	Red Bandana	Net Trap
Captain Leo	Sonic Whistle	Mini Helicopter	Right Handed	Pith Helmet	Sticky Glue
Trekker Tim	Flashlight	Mini Helicopter	Right Handed	Pith Helmet	Sticky Glue
Prospector Pete	Glider Wing	Speedboat	Left Handed	Pith Helmet	Banana Peel
Hunter Amy	Smoke Bomb	Mud Buggy	Right Handed	Pith Helmet	Sticky Glue
Ranger Rick	Glider Wing	Speedboat	Right Handed	Red Bandana	Net Trap
Explorer Ella	Flashlight	Mud Buggy	Left Handed	Red Bandana	Banana Peel
Adventurer Zoe	Flashlight	Mini Helicopter	Left Handed	Brown Fedora	Net Trap
Tracker Tom	Glider Wing	Mini Helicopter	Left Handed	Pith Helmet	Net Trap
Pioneer Ava	Glider Wing	Hover Raft	Left Handed	Brown Fedora	Sticky Glue
Jungle Ben	Smoke Bomb	Speedboat	Left Handed	Red Bandana	Net Trap
Daring Chloe	Sonic Whistle	Speedboat	Left Handed	Red Bandana	Banana Peel
Trekker Tony	Glider Wing	Jungle Quad	Right Handed	Red Bandana	Net Trap

CLUE 1 Addition

We tallied up the total ancient coins found across two digs to get our first lead.

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

T															T
659	549	297	648	938	439	587	297	648	587	439	587	962	268	659	

297	279	977	938	752	297	439	962	938	972	439	962	439			

							T			
549	297	382	439	977	268	752	659	297	648	

$326 + 333 = \square \rightarrow$ T	$94 + 174 = \square \rightarrow$ O	$525 + 447 = \square \rightarrow$ M
$302 + 247 = \square \rightarrow$ H	$151 + 231 = \square \rightarrow$ L	$157 + 140 = \square \rightarrow$ E
$301 + 661 = \square \rightarrow$ N	$155 + 124 = \square \rightarrow$ S	$207 + 380 = \square \rightarrow$ D
$342 + 635 = \square \rightarrow$ C	$475 + 277 = \square \rightarrow$ P	$336 + 602 = \square \rightarrow$ A
$254 + 185 = \square \rightarrow$ I	$334 + 314 = \square \rightarrow$ R	

Scratch space:

CLUE 2
Subtraction

We subtracted the damaged supplies from our expedition pack to check the remnant logs.

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

F																
757	828	828	534	654	694	386	765	534	153	153	361	828	578	534	361	714

694	299	386	280	714	694	166	714	299	765	714	280	534	828	534	361	714

694	386	278	361	534

$1019 - 262 = \boxed{} \rightarrow \boxed{\text{F}}$

$845 - 267 = \boxed{} \rightarrow \boxed{\text{W}}$

$507 - 121 = \boxed{} \rightarrow \boxed{\text{I}}$

$201 - 35 = \boxed{} \rightarrow \boxed{\text{L}}$

$571 - 293 = \boxed{} \rightarrow \boxed{\text{G}}$

$324 - 25 = \boxed{} \rightarrow \boxed{\text{A}}$

$1011 - 297 = \boxed{} \rightarrow \boxed{\text{E}}$

$1145 - 317 = \boxed{} \rightarrow \boxed{\text{O}}$

$413 - 133 = \boxed{} \rightarrow \boxed{\text{D}}$

$166 - 13 = \boxed{} \rightarrow \boxed{\text{S}}$

$741 - 380 = \boxed{} \rightarrow \boxed{\text{H}}$

$768 - 74 = \boxed{} \rightarrow \boxed{\text{R}}$

$911 - 377 = \boxed{} \rightarrow \boxed{\text{T}}$

$915 - 261 = \boxed{} \rightarrow \boxed{\text{P}}$

$944 - 179 = \boxed{} \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3

Rounding

The temple radar screen only shows rounded distances to nearby targets.

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

T								T								T		
5000	70	2000	70	2000	400	700	5000	400	60	20	20	2000	3000	5000	70	2000		
								T				T	T					
400	4000	60	3000	2000	400	500	60	5000	70	4000	900	2000	5000	5000	400	4000	20	

Round 5,058 to the nearest thousand →

T

Round 872 to the nearest hundred →

N

Round 468 to the nearest hundred →

W

Round 3,261 to the nearest thousand →

D

Round 68 to the nearest ten →

H

Round 4,281 to the nearest thousand →

A

Round 371 to the nearest hundred →

R

Round 63 to the nearest ten →

I

Round 746 to the nearest hundred →

O

Round 18 to the nearest ten →

P

Round 2,384 to the nearest thousand →

E

Scratch space:

CLUE 4

Multiplication facts (1-12)

We counted equal rows of stone tiles along the corridor to open the secret passage.

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

A			A										A			A		A
96	27	80	96	35	35	25	50	22	25	50	30	96	80	50	96	80	96	
	A									A			A					
64	96	27	9	15	70	80	50	15	80	96	30	22	96	80	18	16		

$12 \times 8 = \square \rightarrow \boxed{\text{A}}$

$7 \times 5 = \square \rightarrow \boxed{\text{G}}$

$8 \times 10 = \square \rightarrow \boxed{\text{N}}$

$10 \times 5 = \square \rightarrow \boxed{\text{D}}$

$4 \times 4 = \square \rightarrow \boxed{\text{H}}$

$9 \times 2 = \square \rightarrow \boxed{\text{C}}$

$2 \times 11 = \square \rightarrow \boxed{\text{R}}$

$10 \times 7 = \square \rightarrow \boxed{\text{U}}$

$3 \times 9 = \square \rightarrow \boxed{\text{S}}$

$3 \times 5 = \square \rightarrow \boxed{\text{O}}$

$6 \times 5 = \square \rightarrow \boxed{\text{B}}$

$9 \times 1 = \square \rightarrow \boxed{\text{F}}$

$5 \times 5 = \square \rightarrow \boxed{\text{E}}$

$8 \times 8 = \square \rightarrow \boxed{\text{W}}$

Scratch space:

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

We split the rescue ropes evenly among the team members to reach the upper ledge.

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:

$11 \div 1 = \boxed{}$

$35 \div 5 = \boxed{}$

$120 \div 12 = \boxed{}$

$48 \div 12 = \boxed{}$

$27 \div 9 = \boxed{}$

$40 \div 5 = \boxed{}$

$2 \div 2 = \boxed{}$

$132 \div 11 = \boxed{}$

$18 \div 3 = \boxed{}$

$99 \div 11 = \boxed{}$

$45 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain shined a bright flashlight, then sped away in a speedboat.
2. The villain sailed down on a glider wing, then sped away in a speedboat.
3. The villain zipped away with a grapple hook, then roared off in a mud buggy.
4. The villain tossed a blinding smoke bomb, then drifted off on a hover raft.
5. The villain blew a sharp sonic whistle, then flew off in a mini helicopter.
6. The villain sailed down on a glider wing, then roared off in a mud buggy.
7. The villain sailed down on a glider wing, then zoomed away on a jungle quad.
8. The villain tossed a blinding smoke bomb, then roared off in a mud buggy.
9. The villain shined a bright flashlight, then drifted off on a hover raft.
10. The villain sailed down on a glider wing, then drifted off on a hover raft.
11. The villain blew a sharp sonic whistle, then roared off in a mud buggy.
12. The villain zipped away with a grapple hook, then zoomed away on a jungle quad.

Answer Key

The Mystery of the Sunstone Compass

Culprit: Ranger Rick

Glider Wing · Speedboat · Right Handed · Red Bandana · Net Trap

Trail: Start 21 → Clue 1 15 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE RAIDER DID NOT ESCAPE IN A MINI HELICOPTER"

$326 + 333 = 659$ (T) · $94 + 174 = 268$ (O) · $525 + 447 = 972$ (M) · $302 + 247 = 549$ (H) · $151 + 231 = 382$ (L) · $157 + 140 = 297$ (E) · $301 + 661 = 962$ (N) · $155 + 124 = 279$ (S) · $207 + 380 = 587$ (D) · $342 + 635 = 977$ (C) · $475 + 277 = 752$ (P) · $336 + 602 = 938$ (A) · $254 + 185 = 439$ (I) · $334 + 314 = 648$ (R)

Clue 2 (Subtraction): "FOOTPRINTS SHOW THE RAIDER LEANED TO THE RIGHT"

$1019 - 262 = 757$ (F) · $845 - 267 = 578$ (W) · $507 - 121 = 386$ (I) · $201 - 35 = 166$ (L) · $571 - 293 = 278$ (G) · $324 - 25 = 299$ (A) · $1011 - 297 = 714$ (E) · $1145 - 317 = 828$ (O) · $413 - 133 = 280$ (D) · $166 - 13 = 153$ (S) · $741 - 380 = 361$ (H) · $768 - 74 = 694$ (R) · $911 - 377 = 534$ (T) · $915 - 261 = 654$ (P) · $944 - 179 = 765$ (N)

Clue 3 (Rounding): "THE HERO TRIPPED THE RAIDER WITH A NET TRAP"

Round 5,058 to the nearest thousand = 5000 (T) · Round 872 to the nearest hundred = 900 (N) · Round 468 to the nearest hundred = 500 (W) · Round 3,261 to the nearest thousand = 3000 (D) · Round 68 to the nearest ten = 70 (H) · Round 4,281 to the nearest thousand = 4000 (A) · Round 371 to the nearest hundred = 400 (R) · Round 63 to the nearest ten = 60 (I) · Round 746 to the nearest hundred = 700 (O) · Round 18 to the nearest ten = 20 (P) · Round 2,384 to the nearest thousand = 2000 (E)

Clue 4 (Multiplication facts (1-12)): "A SNAGGED RED BANDANA WAS FOUND ON A BRANCH"

$12 \times 8 = 96$ (A) · $7 \times 5 = 35$ (G) · $8 \times 10 = 80$ (N) · $10 \times 5 = 50$ (D) · $4 \times 4 = 16$ (H) · $9 \times 2 = 18$ (C) · $2 \times 11 = 22$ (R) · $10 \times 7 = 70$ (U) · $3 \times 9 = 27$ (S) · $3 \times 5 = 15$ (O) · $6 \times 5 = 30$ (B) · $9 \times 1 = 9$ (F) · $5 \times 5 = 25$ (E) · $8 \times 8 = 64$ (W)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Ranger Rick

$11 \div 1 = 11$ · $35 \div 5 = 7$ · $120 \div 12 = 10$ · $48 \div 12 = 4$ · $27 \div 9 = 3$ · $40 \div 5 = 8$ · $2 \div 2 = 1$ · $132 \div 11 = 12$ · $18 \div 3 = 6$ · $99 \div 11 = 9$ · $45 \div 9 = 5$