



The Canopy Vault Caper

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

Detective: _____ Date: _____

The Golden Acorn of Destiny is missing from the treehouse vault! The Jungle Scouts need your help to track down the culprit before the great jungle storm begins.

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 Phantom Explorer is _____

Possible suspects

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

NAME	EXPLORER GEAR	ANIMAL COMPANION	GRIP STYLE	HAT COLOR	FEAR
Gabe Grove	climbing spikes	pygmy owl	left handed grip	brown safari hat	hates smelly fruit
Penny Pod	glide suit	pet parrot	right handed grip	red bandana	scared of spiders
Ollie Orchid	glide suit	pocket squirrel	left handed grip	red bandana	scared of spiders
Finn Fern	jungle machete	pygmy owl	left handed grip	red bandana	scared of spiders
Jack Wilder	grappling hook	pet parrot	left handed grip	red bandana	ticklish toes
Annie Wilder	grappling hook	pygmy owl	right handed grip	brown safari hat	hates smelly fruit
Daisy Dahlia	laser flashlight	pocket squirrel	left handed grip	green cap	scared of spiders
Sammy Sloth	climbing spikes	baby chameleon	left handed grip	red bandana	hates smelly fruit
Indiana Jones	grappling hook	pocket squirrel	right handed grip	red bandana	scared of spiders
Jane Goodall	jungle machete	pocket squirrel	left handed grip	brown safari hat	scared of spiders
Diego Marquez	climbing spikes	pocket squirrel	right handed grip	brown safari hat	ticklish toes
Leo Leaf	jungle machete	pygmy owl	left handed grip	brown safari hat	scared of spiders
Dora Marquez	jungle machete	helper monkey	left handed grip	brown safari hat	scared of spiders
Rusty Ridge	laser flashlight	pet parrot	left handed grip	red bandana	scared of spiders
Sallie Spruce	jungle machete	baby chameleon	left handed grip	red bandana	scared of spiders
Maya Moss	grappling hook	helper monkey	left handed grip	red bandana	hates smelly fruit
Benny Barnacle	climbing spikes	pygmy owl	left handed grip	red bandana	scared of spiders
Zoe Zip	grappling hook	helper monkey	right handed grip	brown safari hat	hates smelly fruit
Charles Darwin	climbing spikes	baby chameleon	right handed grip	red bandana	scared of spiders
Steve Irwin	glide suit	helper monkey	right handed grip	green cap	scared of spiders
Toby Twig	jungle machete	baby chameleon	left handed grip	green cap	ticklish toes

CLUE 1 Place value

We found a digit lock on the vault door. The glowing lights show numbers in the hundreds place.

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

T			T											T				
100	80	40	100	80	1000	40	50	800	10	40	200	3000	10	100	80	500	70	40

500	200	600	8000	1000	6000	6000	40	7000

What is the value of the 1 in 2,145? → **T**

What is the value of the 7 in 572? → **V**

What is the value of the 3 in 23,805? → **N**

What is the value of the 8 in 3,819? → **D**

What is the value of the 5 in 518? → **A**

What is the value of the 8 in 68,347? → **U**

What is the value of the 8 in 1,386? → **H**

What is the value of the 6 in 36,024? → **R**

What is the value of the 2 in 257? → **S**

What is the value of the 5 in 953? → **F**

What is the value of the 1 in 712? → **O**

What is the value of the 4 in 246? → **E**

What is the value of the 6 in 8,670? → **Q**

What is the value of the 1 in 41,403? → **I**

What is the value of the 7 in 7,944? → **L**

Scratch space:

Rounding

A broken GPS tracker blinks on the floor. It only shows the distance rounded to the nearest ten.

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

Diagram illustrating the numbers and 'T' labels in the first two rows of the table:

- Row 1: 4000 (T), 800, 5000, 30, 5000, 40, 4000 (T), 800, 20, 8000, 7000, 5000, 7000, 4000 (T), 60, 60, 30.
- Row 2: 80, 20, 700, 6000, 400, 600, 5000, 700, 5000, 30, 5000, 40, 4000 (T), 200, 5000, 800, 300, 8000, 7000.

Round 3,936 to the nearest thousand $\rightarrow$ **T**

Round 5,484 to the nearest thousand → **E**

Round 6,632 to the nearest thousand $\rightarrow$ **D**

Round 808 to the nearest hundred $\rightarrow$ **H**

Round 436 to the nearest hundred $\rightarrow$ **S**

Round 601 to the nearest hundred $\rightarrow$ **W**

Round 76 to the nearest ten $\rightarrow$ **M**

Round 44 to the nearest ten $\rightarrow$ **F**

Round 218 to the nearest hundred $\rightarrow$ **B**

Round 61 to the nearest ten $\rightarrow$ **0**

Round 5,994 to the nearest thousand → **K**

Round 720 to the nearest hundred $\rightarrow$ **R**

Round 260 to the nearest hundred $\rightarrow$

Round 8,165 to the nearest thousand → **N**

Round 16 to the nearest ten → **A**

Round 26 to the nearest ten $\rightarrow$ **L**

Scratch space:

CLUE 3 Addition

We need to count all the footprint tracks in the mud. Let us add the totals from both paths.

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

T										T									
471	543	450	452	867	452	760	450	626	471	499	405	337	982	499	229	350	405		

T																
471	735	337	479	724	867	337	552	412	450	452	760	735	227	450	499	

$263 + 208 = \square \rightarrow$ T	$247 + 203 = \square \rightarrow$ E	$254 + 198 = \square \rightarrow$ S
$239 + 166 = \square \rightarrow$ A	$262 + 150 = \square \rightarrow$ L	$213 + 266 = \square \rightarrow$ Y
$325 + 410 = \square \rightarrow$ I	$130 + 207 = \square \rightarrow$ N	$348 + 204 = \square \rightarrow$ G
$305 + 194 = \square \rightarrow$ R	$122 + 105 = \square \rightarrow$ D	$346 + 280 = \square \rightarrow$ C
$68 + 161 = \square \rightarrow$ O	$461 + 406 = \square \rightarrow$ U	$371 + 172 = \square \rightarrow$ H
$194 + 156 = \square \rightarrow$ M	$686 + 296 = \square \rightarrow$ F	$347 + 413 = \square \rightarrow$ P
$507 + 217 = \square \rightarrow$ J		

Scratch space:

CLUE 4

Subtraction

The thief dropped some supplies from their pack. We must subtract what remains from the original count.

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

A					A			A		A					A	
747	235	120	158	811	747	130	158	747	130	747	544	173	235	120	747	158
173	427	130	809	216	235	350	624	544	173	120	235	350	116	120		

$823 - 76 = \square \rightarrow \text{A}$

$213 - 97 = \square \rightarrow \text{P}$

$735 - 308 = \square \rightarrow \text{U}$

$1006 - 195 = \square \rightarrow \text{B}$

$161 - 31 = \square \rightarrow \text{N}$

$365 - 245 = \square \rightarrow \text{E}$

$276 - 118 = \square \rightarrow \text{D}$

$615 - 380 = \square \rightarrow \text{R}$

$295 - 122 = \square \rightarrow \text{H}$

$1155 - 346 = \square \rightarrow \text{G}$

$671 - 127 = \square \rightarrow \text{T}$

$423 - 207 = \square \rightarrow \text{F}$

$946 - 322 = \square \rightarrow \text{M}$

$428 - 78 = \square \rightarrow \text{O}$

Scratch space:

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

We found a box of stolen bananas. If we share them equally among the monkeys we can find the 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:

$36 \div 12 = \square$

$35 \div 7 = \square$

$50 \div 5 = \square$

$12 \div 6 = \square$

$8 \div 1 = \square$

$24 \div 6 = \square$

$35 \div 5 = \square$

$36 \div 4 = \square$

$12 \div 2 = \square$

$36 \div 3 = \square$

$6 \div 6 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain soared down using a glide suit, then escaped as their pet parrot squawked.
2. The villain swung in on a grappling hook, then sneaked out with a baby chameleon on their arm.
3. The villain scaled the tree with climbing spikes, then slipped off as their pygmy owl hooted.
4. The villain shined a bright laser flashlight, then ran away with a pocket squirrel on their shoulder.
5. The villain shined a bright laser flashlight, then escaped as their pet parrot squawked.
6. The villain swung in on a grappling hook, then fled while their helper monkey threw fruit.
7. The villain scaled the tree with climbing spikes, then ran away with a pocket squirrel on their shoulder.
8. The villain scaled the tree with climbing spikes, then fled while their helper monkey threw fruit.
9. The villain swung in on a grappling hook, then slipped off as their pygmy owl hooted.
10. The villain chopped vines with a jungle machete, then slipped off as their pygmy owl hooted.
11. The villain chopped vines with a jungle machete, then sneaked out with a baby chameleon on their arm.
12. The villain shined a bright laser flashlight, then fled while their helper monkey threw fruit.

Answer Key

The Canopy Vault Caper

Culprit: Sallie Spruce

jungle machete · baby chameleon · left handed grip · red bandana · scared of spiders

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT HAVE A SQUIRREL"

What is the value of the 1 in 2,145? = 100 (T) · What is the value of the 7 in 572? = 70 (V) · What is the value of the 3 in 23,805? = 3000 (N) · What is the value of the 8 in 3,819? = 800 (D) · What is the value of the 5 in 518? = 500 (A) · What is the value of the 8 in 68,347? = 8000 (U) · What is the value of the 8 in 1,386? = 80 (H) · What is the value of the 6 in 36,024? = 6000 (R) · What is the value of the 2 in 257? = 200 (S) · What is the value of the 5 in 953? = 50 (F) · What is the value of the 1 in 712? = 10 (O) · What is the value of the 4 in 246? = 40 (E) · What is the value of the 6 in 8,670? = 600 (Q) · What is the value of the 1 in 41,403? = 1000 (I) · What is the value of the 7 in 7,944? = 7000 (L)

Clue 2 (Rounding): "THE LEFT HANDED TOOL MARKS WERE LEFT BEHIND"

Round 3,936 to the nearest thousand = 4000 (T) · Round 5,484 to the nearest thousand = 5000 (E) · Round 6,632 to the nearest thousand = 7000 (D) · Round 808 to the nearest hundred = 800 (H) · Round 436 to the nearest hundred = 400 (S) · Round 601 to the nearest hundred = 600 (W) · Round 76 to the nearest ten = 80 (M) · Round 44 to the nearest ten = 40 (F) · Round 218 to the nearest hundred = 200 (B) · Round 61 to the nearest ten = 60 (O) · Round 5,994 to the nearest thousand = 6000 (K) · Round 720 to the nearest hundred = 700 (R) · Round 260 to the nearest hundred = 300 (I) · Round 8,165 to the nearest thousand = 8000 (N) · Round 16 to the nearest ten = 20 (A) · Round 26 to the nearest ten = 30 (L)

Clue 3 (Addition): "THE SUSPECT RAN FROM A TINY JUNGLE SPIDER"

$263 + 208 = 471$ (T) · $247 + 203 = 450$ (E) · $254 + 198 = 452$ (S) · $239 + 166 = 405$ (A) · $262 + 150 = 412$ (L) · $213 + 266 = 479$ (Y) · $325 + 410 = 735$ (I) · $130 + 207 = 337$ (N) · $348 + 204 = 552$ (G) · $305 + 194 = 499$ (R) · $122 + 105 = 227$ (D) · $346 + 280 = 626$ (C) · $68 + 161 = 229$ (O) · $461 + 406 = 867$ (U) · $371 + 172 = 543$ (H) · $194 + 156 = 350$ (M) · $686 + 296 = 982$ (F) · $347 + 413 = 760$ (P) · $507 + 217 = 724$ (J)

Clue 4 (Subtraction): "A RED BANDANA THREAD HUNG FROM THE ROPE"

$823 - 76 = 747$ (A) · $213 - 97 = 116$ (P) · $735 - 308 = 427$ (U) · $1006 - 195 = 811$ (B) · $161 - 31 = 130$ (N) · $365 - 245 = 120$ (E) · $276 - 118 = 158$ (D) · $615 - 380 = 235$ (R) · $295 - 122 = 173$ (H) · $1155 - 346 = 809$ (G) · $671 - 127 = 544$ (T) · $423 - 207 = 216$ (F) · $946 - 322 = 624$ (M) · $428 - 78 = 350$ (O)

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

$36 \div 12 = 3$ · $35 \div 7 = 5$ · $50 \div 5 = 10$ · $12 \div 6 = 2$ · $8 \div 1 = 8$ · $24 \div 6 = 4$ · $35 \div 5 = 7$ · $36 \div 4 = 9$ · $12 \div 2 = 6$ · $36 \div 3 = 12$ · $6 \div 6 = 1$