



Mystery of the Golden Pineapple

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

Detective: _____ Date: _____

The shiny Golden Pineapple has vanished from the central altar of the Whispering Jungle Temple! The Chief Archaeologist needs your help to find which adventurer turned into the sneaky Shadow Explorer. Follow the trail and search for clues left in the deep mud and tangled vines!

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 Shadow Explorer is _____

Possible suspects

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

NAME	JUNGLE SKILL	SPECIAL TOOL SKILL	FOOTWEAR TYPE	HAIRSTYLE	SECRET FEAR
Cody Canyon	rope swinging	ancient scroll translating	wears clean sneakers	messy brown ponytail	allergic to jungle pollen
Bobby Bush	vine climbing	torch fire lighting	wears muddy boots	spiky bright yellow hair	hates getting feet wet
Leo Legend	trap disarming	quick bridge building	wears clean sneakers	messy brown ponytail	allergic to jungle pollen
Abby Arrow	map reading	secret code cracking	wears muddy boots	neat black braids	hates getting feet wet
Maya Mapmaker	rope swinging	ancient scroll translating	wears muddy boots	neat black braids	allergic to jungle pollen
Penny Pathfinder	animal calling	mud slide gliding	wears clean sneakers	spiky bright yellow hair	allergic to jungle pollen
Wendy Wilder	map reading	mud slide gliding	wears clean sneakers	messy brown ponytail	scared of tiny spiders
Daisy Daring	map reading	secret code cracking	wears clean sneakers	neat black braids	allergic to jungle pollen
River Rush	vine climbing	ancient scroll translating	wears muddy boots	spiky bright yellow hair	hates getting feet wet
Skipper Dan	trap disarming	secret code cracking	wears muddy boots	neat black braids	hates getting feet wet
Rex Ranger	map reading	quick bridge building	wears clean sneakers	neat black braids	hates getting feet wet
Safari Sam	vine climbing	secret code cracking	wears clean sneakers	messy brown ponytail	allergic to jungle pollen
Tracker Toby	trap disarming	torch fire lighting	wears clean sneakers	messy brown ponytail	allergic to jungle pollen
Professor Pippa	rope swinging	secret code cracking	wears clean sneakers	messy brown ponytail	hates getting feet wet
Ranger Rick	trap disarming	quick bridge building	wears clean sneakers	messy brown ponytail	hates getting feet wet
Monty Muddy	trap disarming	mud slide gliding	wears muddy boots	neat black braids	scared of tiny spiders
Jax Journey	rope swinging	ancient scroll translating	wears muddy boots	messy brown ponytail	scared of tiny spiders
Chloe Compass	animal calling	quick bridge building	wears clean sneakers	messy brown ponytail	allergic to jungle pollen
Brody Boulder	map reading	torch fire lighting	wears clean sneakers	spiky bright yellow hair	hates getting feet wet
Scout Sally	map reading	secret code cracking	wears muddy boots	messy brown ponytail	allergic to jungle pollen
Hazel Hunt	map reading	ancient scroll translating	wears clean sneakers	messy brown ponytail	allergic to jungle pollen

CLUE 1 Subtraction

To unlock the temple outer gate we must find the heavy stone keys. Some are missing from the rack. Let us subtract the lost keys from the total to open the path.

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

T																	T
179	260	324	643	663	709	709	745	663	494	888	597	324	770	494	597	179	

T							T									
179	337	745	494	770	709	745	179	324	770	243	337	597	709	709	770	

$280 - 101 = \square \rightarrow$ T	$915 - 252 = \square \rightarrow$ I	$891 - 248 = \square \rightarrow$ V
$634 - 297 = \square \rightarrow$ R	$614 - 17 = \square \rightarrow$ O	$456 - 213 = \square \rightarrow$ C
$1251 - 363 = \square \rightarrow$ D	$658 - 164 = \square \rightarrow$ N	$555 - 231 = \square \rightarrow$ E
$823 - 53 = \square \rightarrow$ S	$530 - 270 = \square \rightarrow$ H	$789 - 44 = \square \rightarrow$ A
$869 - 160 = \square \rightarrow$ L		

Scratch space:

CLUE 2 Rounding

We found a dusty weight scale near the altar. The old dial is too dirty to show the exact weight so we must round the measurement to the nearest ten to read it.

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

T																			
700	800	8000	50	70	20	20	400	70	900	90	8000	400	7000	6000	500	20	8000	400	900
6000	900	8000	400	2000	8000	7000	6000												

Round 722 to the nearest hundred → **T**

Round 72 to the nearest ten → **I**

Round 2,456 to the nearest thousand → **K**

Round 7,751 to the nearest thousand → **E**

Round 49 to the nearest ten → **V**

Round 879 to the nearest hundred → **N**

Round 376 to the nearest hundred → **A**

Round 6,449 to the nearest thousand → **S**

Round 777 to the nearest hundred → **H**

Round 17 to the nearest ten → **L**

Round 92 to the nearest ten → **W**

Round 547 to the nearest hundred → **C**

Round 7,134 to the nearest thousand → **R**

Scratch space:

CLUE 3

The ancient stone steps are covered in shiny green gems. If we add up all the gems on both sides of the pathway we can safely cross the room.

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

710 433 261 436 228 232 467 826 600 710 516 734 261 261 682 261 516 594 710

396 228 734 381 232 261 467 700 232 232 261 734

$$219 + 491 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$439 + 295 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$205 + 389 = \boxed{} \rightarrow \boxed{\text{A}}$$

$318 + 149 = \boxed{} \rightarrow \boxed{\text{P}}$

$303 + 297 = \boxed{} \rightarrow \boxed{}$

$143 + 89 = \boxed{} \rightarrow \boxed{\text{L}}$

$$81 + 147 = \boxed{} \rightarrow \boxed{\mathbf{U}}$$

$$357 + 325 = \boxed{} \rightarrow \boxed{\mathbf{Z}}$$

$166 + 230 = \boxed{} \rightarrow \boxed{\mathbf{J}}$

$$138 + 295 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$191 + 245 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$488 + 212 = \boxed{} \rightarrow \boxed{0}$$

$227 + 154 = \boxed{} \rightarrow \boxed{\text{G}}$

$$167 + 349 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$297 + 529 = \boxed{} \rightarrow \boxed{\text{R}}$$

$116 + 145 = \boxed{} \rightarrow \boxed{\text{E}}$

Scratch space:

CLUE 4 Multiplication facts (1-12)

To open the secret wall compartment we need to count the carvings of monkeys on the wall. They are arranged in neat rows and columns.

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

A number line from 0 to 1000 with boxes for numbers and their prime factors. The number 96 is highlighted in orange.

Number	Prime Factors
96	2, 2, 2, 2, 3
110	2, 5, 11
1	
32	2, 2, 2, 2, 2
42	2, 3, 7
18	2, 3, 3
66	2, 3, 11
70	2, 5, 7
55	5, 11
110	2, 5, 11
30	2, 3, 5
30	2, 3, 5
132	2, 2, 3, 11
84	2, 2, 3, 7
50	2, 5, 5
32	2, 2, 2, 2, 2
96	2, 2, 2, 2, 3
18	2, 3, 3

$$12 \times 8 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

$$5 \times 10 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$6 \times 3 = \boxed{} \rightarrow \boxed{\text{N}}$$

$12 \times 11 = \boxed{} \rightarrow \boxed{\text{Y}}$

$4 \times 8 = \boxed{} \rightarrow \boxed{0}$

$1 \times 1 = \boxed{} \rightarrow \boxed{\mathbf{F}}$

$$5 \times 11 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$3 \times 5 = \boxed{} \rightarrow \boxed{1}$$

$$8 \times 8 = \boxed{} \rightarrow \boxed{\text{H}}$$

$1 \times 12 = \boxed{} \rightarrow \boxed{\text{P}}$

$6 \times 11 = \boxed{} \rightarrow \boxed{\text{D}}$

$7 \times 4 = \boxed{} \rightarrow \boxed{\text{T}}$

$11 \times 10 = \boxed{} \rightarrow \boxed{\text{E}}$

$12 \times 7 = \square \rightarrow \mathbf{B}$

$3 \times 10 = \square \rightarrow \boxed{\text{S}}$

$$6 \times 7 = \boxed{} \rightarrow \boxed{\text{U}}$$

$8 \times 6 = \boxed{} \rightarrow \boxed{\text{L}}$

$10 \times 7 = \square \rightarrow \mathbf{A}$

Scratch space:

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

We found a pack of delicious banana snacks. If we share them equally among our rescue teams we can keep everyone happy and move forward.

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:

$66 \div 11 = \boxed{}$

$11 \div 11 = \boxed{}$

$48 \div 6 = \boxed{}$

$36 \div 9 = \boxed{}$

$10 \div 1 = \boxed{}$

$20 \div 10 = \boxed{}$

$5 \div 1 = \boxed{}$

$88 \div 8 = \boxed{}$

$27 \div 3 = \boxed{}$

$24 \div 8 = \boxed{}$

$48 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain disarms a sneaky dart trap, then builds a quick wooden bridge.
2. The villain mimics a wild parrot call, then translates a dusty ancient scroll.
3. The villain climbs a wall of tangled vines, then translates a dusty ancient scroll.
4. The villain mimics a wild parrot call, then lights a bright campfire torch.
5. The villain studies a dusty ancient map, then lights a bright campfire torch.
6. The villain disarms a sneaky dart trap, then lights a bright campfire torch.
7. The villain mimics a wild parrot call, then builds a quick wooden bridge.
8. The villain climbs a wall of tangled vines, then cracks a secret stone code.
9. The villain climbs a wall of tangled vines, then glides down a steep mud slide.
10. The villain studies a dusty ancient map, then glides down a steep mud slide.
11. The villain studies a dusty ancient map, then translates a dusty ancient scroll.
12. The villain studies a dusty ancient map, then builds a quick wooden bridge.

Answer Key

Mystery of the Golden Pineapple

Culprit: Chloe Compass

animal calling · quick bridge building · wears clean sneakers · messy brown ponytail · allergic to jungle pollen

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

Clue 1 (Subtraction): "THE VILLAIN DOES NOT TRANSLATE SCROLLS"

$280 - 101 = 179$ (T) · $915 - 252 = 663$ (I) · $891 - 248 = 643$ (V) · $634 - 297 = 337$ (R) · $614 - 17 = 597$ (O) · $456 - 213 = 243$ (C) · $1251 - 363 = 888$ (D) · $658 - 164 = 494$ (N) · $555 - 231 = 324$ (E) · $823 - 53 = 770$ (S) · $530 - 270 = 260$ (H) · $789 - 44 = 745$ (A) · $869 - 160 = 709$ (L)

Clue 2 (Rounding): "THE VILLAIN WEARS CLEAN SNEAKERS"

Round 722 to the nearest hundred = 700 (T) · Round 72 to the nearest ten = 70 (I) · Round 2,456 to the nearest thousand = 2000 (K) · Round 7,751 to the nearest thousand = 8000 (E) · Round 49 to the nearest ten = 50 (V) · Round 879 to the nearest hundred = 900 (N) · Round 376 to the nearest hundred = 400 (A) · Round 6,449 to the nearest thousand = 6000 (S) · Round 777 to the nearest hundred = 800 (H) · Round 17 to the nearest ten = 20 (L) · Round 92 to the nearest ten = 90 (W) · Round 547 to the nearest hundred = 500 (C) · Round 7,134 to the nearest thousand = 7000 (R)

Clue 3 (Addition): "THE CULPRIT SNEEZES AT JUNGLE POLLEN"

$219 + 491 = 710$ (T) · $439 + 295 = 734$ (N) · $205 + 389 = 594$ (A) · $318 + 149 = 467$ (P) · $303 + 297 = 600$ (I) · $143 + 89 = 232$ (L) · $81 + 147 = 228$ (U) · $357 + 325 = 682$ (Z) · $166 + 230 = 396$ (J) · $138 + 295 = 433$ (H) · $191 + 245 = 436$ (C) · $488 + 212 = 700$ (O) · $227 + 154 = 381$ (G) · $167 + 349 = 516$ (S) · $297 + 529 = 826$ (R) · $116 + 145 = 261$ (E)

Clue 4 (Multiplication facts (1-12)): "WE FOUND A MESSY BROWN PONYTAIL HAIR"

$12 \times 8 = 96$ (W) · $5 \times 10 = 50$ (R) · $6 \times 3 = 18$ (N) · $12 \times 11 = 132$ (Y) · $4 \times 8 = 32$ (O) · $1 \times 1 = 1$ (F) · $5 \times 11 = 55$ (M) · $3 \times 5 = 15$ (I) · $8 \times 8 = 64$ (H) · $1 \times 12 = 12$ (P) · $6 \times 11 = 66$ (D) · $7 \times 4 = 28$ (T) · $11 \times 10 = 110$ (E) · $12 \times 7 = 84$ (B) · $3 \times 10 = 30$ (S) · $6 \times 7 = 42$ (U) · $8 \times 6 = 48$ (L) · $10 \times 7 = 70$ (A)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Chloe Compass

$66 \div 11 = 6$ · $11 \div 11 = 1$ · $48 \div 6 = 8$ · $36 \div 9 = 4$ · $10 \div 1 = 10$ · $20 \div 10 = 2$ · $5 \div 1 = 5$ · $88 \div 8 = 11$ · $27 \div 3 = 9$ · $24 \div 8 = 3$ · $48 \div 4 = 12$