



The Golden Pineapple Caper

Grade 5 math · Place value, Multi-step word problems, Fractions of a number, Order of operations, Division · Reading
level grades 3-4

Detective: _____ Date: _____

The legendary Golden Pineapple has been swiped from the Banana Leaf Bay Museum! A tricky rival explorer broke in and took off with the prize. Use your math skills and search for clues to catch the thief!

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 Rival Explorer is _____

Possible suspects

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

NAME	ADVENTURE GEAR	ISLAND PET	HANDEDNESS	HAT COLOR	FEAR OF
Fern Forest	Night Vision Goggles	Screeching Parrot	Writes with right hand	Bright Red Hat	Afraid of Heights
Wilder West	Night Vision Goggles	Spunky Squirrel	Writes with right hand	Bright Red Hat	Afraid of Heights
Ridge Runner	Grappling Hook	Tree Frog	Writes with left hand	Bright Red Hat	Afraid of Water
Ranger Rick	Grappling Hook	Tree Frog	Writes with right hand	Bright Red Hat	Afraid of Heights
Safari Sam	Treasure Map	Clever Monkey	Writes with right hand	Forest Green Hat	Afraid of Spiders
Barnaby Jones	Grappling Hook	Spunky Squirrel	Writes with right hand	Dusty Brown Hat	Afraid of Water
Marina Mast	Treasure Map	Spunky Squirrel	Writes with right hand	Dusty Brown Hat	Afraid of Spiders
Hazel Wood	Treasure Map	Clever Monkey	Writes with left hand	Dusty Brown Hat	Afraid of Heights
Sandy Shore	Brass Compass	Tree Frog	Writes with left hand	Dusty Brown Hat	Afraid of Heights
Indiana Bones	Brass Compass	Sleepy Sloth	Writes with left hand	Dusty Brown Hat	Afraid of Heights
Buster Boulder	Grappling Hook	Sleepy Sloth	Writes with left hand	Dusty Brown Hat	Afraid of Heights
Canyon Clay	Grappling Hook	Clever Monkey	Writes with left hand	Dusty Brown Hat	Afraid of Spiders
Tracker Tim	Treasure Map	Clever Monkey	Writes with left hand	Forest Green Hat	Afraid of Heights
Jungle Jane	Brass Compass	Clever Monkey	Writes with left hand	Dusty Brown Hat	Afraid of Heights
Clara Cliff	Night Vision Goggles	Tree Frog	Writes with right hand	Bright Red Hat	Afraid of Heights
Explorer Ellie	Grappling Hook	Spunky Squirrel	Writes with left hand	Dusty Brown Hat	Afraid of Heights
Sky Skyler	Brass Compass	Tree Frog	Writes with right hand	Dusty Brown Hat	Afraid of Heights
Professor Pine	Treasure Map	Tree Frog	Writes with left hand	Forest Green Hat	Afraid of Heights
Captain Barnaby	Night Vision Goggles	Tree Frog	Writes with left hand	Bright Red Hat	Afraid of Heights
River Rush	Jungle Machete	Screeching Parrot	Writes with right hand	Dusty Brown Hat	Afraid of Spiders
Daring Danny	Grappling Hook	Tree Frog	Writes with left hand	Dusty Brown Hat	Afraid of Water

CLUE 1 Place value

We found the vault where the thief was hiding. The digital lock has a huge number glowing on it. If we find the digit in the ten-thousands place, we can open the door.

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

T			T											T					
2000	1000	700	2000	1000	4000	700	400	40	9000	700	5000	30	9000	2000	1000	800	8000	700	
											T								
800	5000	20	700	700	50	10	5000	20	9000	2000	1000								

What is the value of the 2 in 72,374? → **T**

What is the value of the 9 in 249,010? → **O**

What is the value of the 4 in 87,742? → **D**

What is the value of the 3 in 261,132? → **N**

What is the value of the 4 in 710,403? → **F**

What is the value of the 7 in 966,756? → **E**

What is the value of the 5 in 235,602? → **S**

What is the value of the 2 in 513,426? → **L**

What is the value of the 1 in 51,386? → **H**

What is the value of the 5 in 70,756? → **P**

What is the value of the 8 in 738,562? → **V**

What is the value of the 8 in 55,851? → **A**

What is the value of the 1 in 603,418? → **Y**

What is the value of the 4 in 724,286? → **I**

Scratch space:

CLUE 2

Multi-step word problems

The camp kitchen was raided. We need to add up all the stolen food packs and subtract the empty boxes to find the true count.

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

A witness saw the villain was

W
W
L F
A N D .

6 16 11 30 29 48 6 11 30 47 29 30 47

Explorer earned 2 magnifying glasses in each of 4 rounds, plus 1 bonus magnifying glasses. Then 3 magnifying glasses were lost. How many magnifying glasses are left?

Answer: → W

There were 118 magnifying glasses in all. 2 crew used 35 magnifying glasses each. The other 3 crew shared the rest equally. How many magnifying glasses did each of the other crew get?

Answer: → R

Explorer earned 8 compasses in each of 5 rounds, plus 16 bonus compasses. Then 8 compasses were lost. How many compasses are left?

Answer: → S

There were 162 canteen flasks in all. 1 crew used 21 canteen flasks each. The other 3 crew shared the rest equally. How many canteen flasks did each of the other crew get?

Answer: → H

Explorer earned 8 climbing ropes in each of 2 rounds, plus 16 bonus climbing ropes. Then 2 climbing ropes were lost. How many climbing ropes are left?

Answer: → T

Explorer collected 15 canteen flasks in the morning and 7 canteen flasks in the afternoon, then split them equally among 2 crew. How many canteen flasks did each get?

Answer: → I

Explorer collected 21 climbing ropes in the morning and 37 climbing ropes in the afternoon, then split them equally among 2 crew. How many climbing ropes did each get?

Answer: → E

Scratch space:

CLUE 3

Fractions of a number

The thief tore the island map into equal pieces. We must find the fraction of the coordinates that still points to the correct trail.

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

T			T						T										T
8	30	22	8	6	4	12	22	8	3	7	17	15	13	5	7	8			
33	15	34	23	29	8	30	22	8	6	15	15	8	4	22	22				

$$4/5 \text{ of } 10 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2/6 \text{ of } 87 = \boxed{} \rightarrow \boxed{\text{B}}$$

$$1/8 \text{ of } 24 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$2/10 \text{ of } 25 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$2/6 \text{ of } 102 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$1/5 \text{ of } 85 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$6/10 \text{ of } 10 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$2/8 \text{ of } 28 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$4/8 \text{ of } 44 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$5/10 \text{ of } 46 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$2/10 \text{ of } 75 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$6/10 \text{ of } 55 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$1/10 \text{ of } 130 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$8/10 \text{ of } 15 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$3/6 \text{ of } 8 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$2/4 \text{ of } 60 = \boxed{} \rightarrow \boxed{\text{H}}$$

Scratch space:

CLUE 4
Order of operations

To cross the rope bridge, we have to step on the carved stones in the exact order of operations.

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

W																	
30	74	11	50	12	78	37	37	12	72	21	58	77	71	50	30	78	

39	62	21	11	10	77	74	71	72	

$6 \times 10 - 30 = \square \rightarrow \boxed{W}$

$9 \times 6 - 17 = \square \rightarrow \boxed{D}$

$4 + 7 \times 5 = \square \rightarrow \boxed{H}$

$3 \times 6 - 6 = \square \rightarrow \boxed{U}$

$38 + 2 \times 6 = \square \rightarrow \boxed{O}$

$2 + 4 \times 2 = \square \rightarrow \boxed{I}$

$3 + 4 \times 2 = \square \rightarrow \boxed{F}$

$9 \times 8 - 10 = \square \rightarrow \boxed{A}$

$11 \times 9 - 21 = \square \rightarrow \boxed{N}$

$42 + 5 \times 6 = \square \rightarrow \boxed{S}$

$9 \times 9 - 10 = \square \rightarrow \boxed{R}$

$9 \times 9 - 7 = \square \rightarrow \boxed{E}$

$67 + 5 \times 2 = \square \rightarrow \boxed{B}$

$3 \times 9 - 6 = \square \rightarrow \boxed{T}$

$40 + 3 \times 6 = \square \rightarrow \boxed{Y}$

Scratch space:

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

We have to split our flashlight batteries equally among the search teams so nobody gets lost in the dark.

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:

$36 \div 12 = \square$

$4 \div 1 = \square$

$132 \div 12 = \square$

$9 \div 1 = \square$

$25 \div 5 = \square$

$120 \div 12 = \square$

$66 \div 11 = \square$

$2 \div 2 = \square$

$12 \div 1 = \square$

$96 \div 12 = \square$

$77 \div 11 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain sneaked through the dark cave using night vision goggles, then escaped with a colorful tree frog on their hat.
2. The villain followed the secret trails on a treasure map, then escaped with a clever monkey leading the way.
3. The villain swung across the canyon using a grappling hook, then escaped with a spunky squirrel riding on their shoulder.
4. The villain navigated the winding paths with a brass compass, then escaped with a colorful tree frog on their hat.
5. The villain sneaked through the dark cave using night vision goggles, then escaped with a sleepy sloth hanging onto their backpack.
6. The villain cleared the thick vines with a jungle machete, then escaped with a sleepy sloth hanging onto their backpack.
7. The villain cleared the thick vines with a jungle machete, then escaped with a spunky squirrel riding on their shoulder.
8. The villain cleared the thick vines with a jungle machete, then escaped with a screeching parrot on their shoulder.
9. The villain swung across the canyon using a grappling hook, then escaped with a sleepy sloth hanging onto their backpack.
10. The villain followed the secret trails on a treasure map, then escaped with a colorful tree frog on their hat.
11. The villain navigated the winding paths with a brass compass, then escaped with a clever monkey leading the way.
12. The villain followed the secret trails on a treasure map, then escaped with a spunky squirrel riding on their shoulder.

Answer Key

The Golden Pineapple Caper

Culprit: Hazel Wood

Treasure Map · Clever Monkey · Writes with left hand · Dusty Brown Hat · Afraid of Heights

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

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

What is the value of the 2 in 72,374? = 2000 (T) · What is the value of the 9 in 249,010? = 9000 (O) · What is the value of the 4 in 87,742? = 40 (D) · What is the value of the 3 in 261,132? = 30 (N) · What is the value of the 4 in 710,403? = 400 (F) · What is the value of the 7 in 966,756? = 700 (E) · What is the value of the 5 in 235,602? = 5000 (S) · What is the value of the 2 in 513,426? = 20 (L) · What is the value of the 1 in 51,386? = 1000 (H) · What is the value of the 5 in 70,756? = 50 (P) · What is the value of the 8 in 738,562? = 8000 (V) · What is the value of the 8 in 55,851? = 800 (A) · What is the value of the 1 in 603,418? = 10 (Y) · What is the value of the 4 in 724,286? = 4000 (I)

Clue 2 (Multi-step word problems): "WRITES WITH LEFT HAND"

Explorer earned 2 magnifying glasses in each of 4 rounds, plus 1 bonus magnifying glasses. Then 3 magnifying glasses were lost. How many magnifying glasses are left? = 6 (W) · There were 118 magnifying glasses in all. 2 crew used 35 magnifying glasses each. The other 3 crew shared the rest equally. How many magnifying glasses did each of the other crew get? = 16 (R) · Explorer earned 8 compasses in each of 5 rounds, plus 16 bonus compasses. Then 8 compasses were lost. How many compasses are left? = 48 (S) · There were 162 canteen flasks in all. 1 crew used 21 canteen flasks each. The other 3 crew shared the rest equally. How many canteen flasks did each of the other crew get? = 47 (H) · Explorer earned 8 climbing ropes in each of 2 rounds, plus 16 bonus climbing ropes. Then 2 climbing ropes were lost. How many climbing ropes are left? = 30 (T) · Explorer collected 15 canteen flasks in the morning and 7 canteen flasks in the afternoon, then split them equally among 2 crew. How many canteen flasks did each get? = 11 (I) · Explorer collected 21 climbing ropes in the morning and 37 climbing ropes in the afternoon, then split them equally among 2 crew. How many climbing ropes did each get? = 29 (E)

Clue 3 (Fractions of a number): "THE TARGET WOULD NOT CLIMB THE TALL TREE"

$\frac{4}{5}$ of 10 = 8 (T) · $\frac{2}{6}$ of 87 = 29 (B) · $\frac{1}{8}$ of 24 = 3 (W) · $\frac{2}{10}$ of 25 = 5 (N) · $\frac{2}{6}$ of 102 = 34 (I) · $\frac{1}{5}$ of 85 = 17 (U) · $\frac{6}{10}$ of 10 = 6 (A) · $\frac{2}{8}$ of 28 = 7 (O) · $\frac{4}{8}$ of 44 = 22 (E) · $\frac{5}{10}$ of 46 = 23 (M) · $\frac{2}{10}$ of 75 = 15 (L) · $\frac{6}{10}$ of 55 = 33 (C) · $\frac{1}{10}$ of 130 = 13 (D) · $\frac{8}{10}$ of 15 = 12 (G) · $\frac{3}{6}$ of 8 = 4 (R) · $\frac{2}{4}$ of 60 = 30 (H)

Clue 4 (Order of operations): "WE FOUND DUSTY BROWN HAT FIBERS"

$6 \times 10 - 30 = 30$ (W) · $9 \times 6 - 17 = 37$ (D) · $4 + 7 \times 5 = 39$ (H) · $3 \times 6 - 6 = 12$ (U) · $38 + 2 \times 6 = 50$ (O) · $2 + 4 \times 2 = 10$ (I) · $3 + 4 \times 2 = 11$ (F) · $9 \times 8 - 10 = 62$ (A) · $11 \times 9 - 21 = 78$ (N) · $42 + 5 \times 6 = 72$ (S) · $9 \times 9 - 10 = 71$ (R) · $9 \times 9 - 7 = 74$ (E) · $67 + 5 \times 2 = 77$ (B) · $3 \times 9 - 6 = 21$ (T) · $40 + 3 \times 6 = 58$ (Y)

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

$36 \div 12 = 3$ · $4 \div 1 = 4$ · $132 \div 12 = 11$ · $9 \div 1 = 9$ · $25 \div 5 = 5$ · $120 \div 12 = 10$ · $66 \div 11 = 6$ · $2 \div 2 = 1$ · $12 \div 1 = 12$ · $96 \div 12 = 8$ · $77 \div 11 = 7$