



The Mystery of the Sky Pirate's Spark

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

Detective: _____ Date: _____

The legendary Glowstone has been taken from the great treehouse temple! A mysterious sky pirate slipped through the canopy under the cover of night. Only the cleverest detective can follow the clues left behind and save the island.

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 thief is _____

Possible suspects

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

NAME	EXPLORER TOOL	BACKPACK TOY	MAP GRIP	BANDANA	DISTRACTION
Clara	Compass Badge	Net Shooter	Right-handed	Blue Bandana	Loud Parrot
Finn	Glider Wings	Slime Launcher	Left-handed	Green Bandana	Loud Parrot
Leo	Spyglass Lens	Slime Launcher	Right-handed	Green Bandana	Loud Parrot
Toby	Rope Lasso	Slime Launcher	Right-handed	Green Bandana	Loud Parrot
Piper	Spyglass Lens	Smoke Bomb	Right-handed	Blue Bandana	Loud Parrot
Beckett	Grappling Hook	Net Shooter	Right-handed	Green Bandana	Itchy Vines
Nellie	Spyglass Lens	Bubble Blaster	Right-handed	Blue Bandana	Itchy Vines
Hudson	Spyglass Lens	Sparkler Wand	Left-handed	Green Bandana	Shiny Coins
Drake	Grappling Hook	Smoke Bomb	Right-handed	Blue Bandana	Loud Parrot
Kira	Grappling Hook	Smoke Bomb	Left-handed	Blue Bandana	Loud Parrot
Silas	Spyglass Lens	Smoke Bomb	Left-handed	Green Bandana	Shiny Coins
Marco	Grappling Hook	Sparkler Wand	Left-handed	Blue Bandana	Itchy Vines
Marina	Compass Badge	Sparkler Wand	Right-handed	Red Bandana	Shiny Coins
Jack	Grappling Hook	Smoke Bomb	Left-handed	Green Bandana	Shiny Coins
Sacagawea	Glider Wings	Bubble Blaster	Right-handed	Blue Bandana	Loud Parrot
Mae	Rope Lasso	Net Shooter	Right-handed	Blue Bandana	Loud Parrot
Wyatt	Rope Lasso	Slime Launcher	Right-handed	Red Bandana	Loud Parrot
Freya	Glider Wings	Smoke Bomb	Right-handed	Blue Bandana	Shiny Coins
Caspian	Glider Wings	Smoke Bomb	Left-handed	Green Bandana	Loud Parrot
Sienna	Compass Badge	Smoke Bomb	Left-handed	Red Bandana	Shiny Coins
Amelia	Glider Wings	Sparkler Wand	Left-handed	Green Bandana	Loud Parrot

CLUE 1 Place value

You find a locked chest on the ship deck. The number code has a secret value in the tens place.

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

T			T											T			
7000	300	90	7000	300	4000	90	70	1000	10	90	500	20	10	7000	900	500	90

T												T			
7000	300	90	400	900	400	400	6000	90	400	6000	40	500	7000	90	100

What is the value of the 7 in 37,328?

→

T

What is the value of the 4 in 74,928?

→

I

What is the value of the 7 in 976?

→

F

What is the value of the 6 in 46,382?

→

L

What is the value of the 2 in 123?

→

N

What is the value of the 1 in 519?

→

O

What is the value of the 4 in 9,416?

→

B

What is the value of the 1 in 132?

→

R

What is the value of the 5 in 523?

→

S

What is the value of the 1 in 31,272?

→

D

What is the value of the 9 in 697?

→

E

What is the value of the 4 in 546?

→

A

What is the value of the 9 in 926?

→

U

What is the value of the 3 in 5,314?

→

H

Scratch space:

CLUE 2
Multiplication facts (1-12)

To track the thief's escape path, you must count the crates stacked in neat rows on the dock.

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

T			T									T					
60	35	81	60	35	96	81	56	35	81	32	40	60	35	81	90	28	121
		T		T									T				
55	96	60	35	60	35	81	96	132	132	96	2	35	60	35	28	66	40

$12 \times 5 = \square \rightarrow \boxed{\text{T}}$

$7 \times 8 = \square \rightarrow \boxed{\text{F}}$

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

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

$9 \times 9 = \square \rightarrow \boxed{\text{E}}$

$12 \times 11 = \square \rightarrow \boxed{\text{R}}$

$4 \times 8 = \square \rightarrow \boxed{\text{L}}$

$8 \times 5 = \square \rightarrow \boxed{\text{D}}$

$2 \times 1 = \square \rightarrow \boxed{\text{G}}$

$11 \times 11 = \square \rightarrow \boxed{\text{P}}$

$6 \times 11 = \square \rightarrow \boxed{\text{N}}$

$7 \times 4 = \square \rightarrow \boxed{\text{A}}$

$5 \times 11 = \square \rightarrow \boxed{\text{W}}$

$9 \times 10 = \square \rightarrow \boxed{\text{M}}$

Scratch space:

Rounding

The thief's flying machine left a signal. The radar screen 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.

The diagram illustrates a sequence of numbers arranged in two rows. The top row contains 18 boxes, and the bottom row contains 12 boxes. Some boxes are shaded orange and contain the letter 'T'. Below each box is a number.

Top Row:

- Box 1 (shaded orange, contains 'T'): 7000
- Box 2: 170
- Box 3: 130
- Box 4: 110
- Box 5: 30
- Box 6: 230
- Box 7: 230
- Box 8: 3700
- Box 9: 30
- Box 10: 3000
- Box 11: 20
- Box 12: 170
- Box 13: 30
- Box 14: 110
- Box 15: 130
- Box 16: 200
- Box 17: 130
- Box 18: 4300
- Box 19 (shaded orange, contains 'T'): 3700
- Box 20 (shaded orange, contains 'T'): 7000

Bottom Row:

- Box 1 (shaded orange, contains 'T'): 7000
- Box 2: 170
- Box 3: 130
- Box 4: 230
- Box 5: 5000
- Box 6: 900
- Box 7: 4300
- Box 8: 2900
- Box 9: 3700
- Box 10: 200
- Box 11: 200
- Box 12: 5000
- Box 13 (shaded orange, contains 'T'): 7000

Round 6,505 to the nearest thousand $\rightarrow$ **T**

Round 113 to the nearest ten $\rightarrow$ **V**

Round 3,740 to the nearest hundred $\rightarrow$ **A**

Round 241 to the nearest hundred $\rightarrow$ **R**

Round 4,868 to the nearest thousand $\rightarrow$ **0**

Round 21 to the nearest ten $\rightarrow$ **S**

Round 2,994 to the nearest thousand → **N**

Round 29 to the nearest ten $\rightarrow$

Round 133 to the nearest ten $\rightarrow$ **E**

Round 230 to the nearest ten $\rightarrow$ **L**

Round 4,296 to the nearest hundred $\rightarrow$ **D**

Round 924 to the nearest hundred $\rightarrow$ **U**

Round 174 to the nearest ten $\rightarrow$ **H**

Round 2,883 to the nearest hundred → **P**

Scratch space:

CLUE 4

Addition

A friendly monkey helps you count all the stolen fruit dropped along the muddy path.

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

W																		
8562	3054	4035	6686	9361	4591	3596	6517	5798	9663	9361	3054	5798	6517	4591	3596	6517	4591	6517

9663	3054	4035	5020	6686	4591	5020	5897	3054	5798	9183	6517	4591	6267	5897

$3340 + 5222 = \square \rightarrow \text{W}$	$3998 + 2688 = \square \rightarrow \text{O}$	$6041 + 3142 = \square \rightarrow \text{R}$
$5755 + 3908 = \square \rightarrow \text{L}$	$3016 + 2004 = \square \rightarrow \text{T}$	$4116 + 2151 = \square \rightarrow \text{C}$
$4113 + 1784 = \square \rightarrow \text{H}$	$1422 + 2174 = \square \rightarrow \text{D}$	$3851 + 2666 = \square \rightarrow \text{A}$
$2003 + 2032 = \square \rightarrow \text{F}$	$1899 + 3899 = \square \rightarrow \text{B}$	$2073 + 2518 = \square \rightarrow \text{N}$
$1945 + 1109 = \square \rightarrow \text{E}$	$5007 + 4354 = \square \rightarrow \text{U}$	

Scratch space:

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

The crew splits the supply boxes evenly among the scout boats to speed up the chase.

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:

$21 \div 3 = \boxed{}$

$16 \div 2 = \boxed{}$

$12 \div 12 = \boxed{}$

$20 \div 2 = \boxed{}$

$15 \div 5 = \boxed{}$

$40 \div 8 = \boxed{}$

$32 \div 8 = \boxed{}$

$99 \div 9 = \boxed{}$

$18 \div 9 = \boxed{}$

$54 \div 6 = \boxed{}$

$12 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain tangled the guard with a rope lasso, then trapped the dog with a net shooter.
2. The villain swung on a grappling hook, then lit up the trail with a sparkler wand.
3. The villain swung on a grappling hook, then trapped the dog with a net shooter.
4. The villain swung on a grappling hook, then sprayed soapy suds with a bubble blaster.
5. The villain peered through a spyglass lens, then fired a gooey slime launcher.
6. The villain peered through a spyglass lens, then trapped the dog with a net shooter.
7. The villain swung on a grappling hook, then vanished behind a smoke bomb.
8. The villain peered through a spyglass lens, then vanished behind a smoke bomb.
9. The villain soared away on glider wings, then trapped the dog with a net shooter.
10. The villain swung on a grappling hook, then fired a gooey slime launcher.
11. The villain tangled the guard with a rope lasso, then fired a gooey slime launcher.
12. The villain checked their compass badge, then trapped the dog with a net shooter.

Answer Key

The Mystery of the Sky Pirate's Spark

Culprit: Clara

Compass Badge · Net Shooter · Right-handed · Blue Bandana · Loud Parrot

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 USE THE BUBBLE BLASTER"

What is the value of the 7 in 37,328? = 7000 (T) · What is the value of the 4 in 74,928? = 4000 (I) · What is the value of the 7 in 976? = 70 (F) · What is the value of the 6 in 46,382? = 6000 (L) · What is the value of the 2 in 123? = 20 (N) · What is the value of the 1 in 519? = 10 (O) · What is the value of the 4 in 9,416? = 400 (B) · What is the value of the 1 in 132? = 100 (R) · What is the value of the 5 in 523? = 500 (S) · What is the value of the 1 in 31,272? = 1000 (D) · What is the value of the 9 in 697? = 90 (E) · What is the value of the 4 in 546? = 40 (A) · What is the value of the 9 in 926? = 900 (U) · What is the value of the 3 in 5,314? = 300 (H)

Clue 2 (Multiplication facts (1-12)): "THE THIEF HELD THE MAP WITH THEIR RIGHT HAND"

$12 \times 5 = 60$ (T) · $7 \times 8 = 56$ (F) · $8 \times 12 = 96$ (I) · $5 \times 7 = 35$ (H) · $9 \times 9 = 81$ (E) · $12 \times 11 = 132$ (R) · $4 \times 8 = 32$ (L) · $8 \times 5 = 40$ (D) · $2 \times 1 = 2$ (G) · $11 \times 11 = 121$ (P) · $6 \times 11 = 66$ (N) · $7 \times 4 = 28$ (A) · $5 \times 11 = 55$ (W) · $9 \times 10 = 90$ (M)

Clue 3 (Rounding): "THE VILLAIN SHIVERED AT THE LOUD PARROT"

Round 6,505 to the nearest thousand = 7000 (T) · Round 113 to the nearest ten = 110 (V) · Round 3,740 to the nearest hundred = 3700 (A) · Round 241 to the nearest hundred = 200 (R) · Round 4,868 to the nearest thousand = 5000 (O) · Round 21 to the nearest ten = 20 (S) · Round 2,994 to the nearest thousand = 3000 (N) · Round 29 to the nearest ten = 30 (I) · Round 133 to the nearest ten = 130 (E) · Round 230 to the nearest ten = 230 (L) · Round 4,296 to the nearest hundred = 4300 (D) · Round 924 to the nearest hundred = 900 (U) · Round 174 to the nearest ten = 170 (H) · Round 2,883 to the nearest hundred = 2900 (P)

Clue 4 (Addition): "WE FOUND A BLUE BANDANA LEFT ON THE BRANCH"

$3340 + 5222 = 8562$ (W) · $3998 + 2688 = 6686$ (O) · $6041 + 3142 = 9183$ (R) · $5755 + 3908 = 9663$ (L) · $3016 + 2004 = 5020$ (T) · $4116 + 2151 = 6267$ (C) · $4113 + 1784 = 5897$ (H) · $1422 + 2174 = 3596$ (D) · $3851 + 2666 = 6517$ (A) · $2003 + 2032 = 4035$ (F) · $1899 + 3899 = 5798$ (B) · $2073 + 2518 = 4591$ (N) · $1945 + 1109 = 3054$ (E) · $5007 + 4354 = 9361$ (U)

Clue 5 (Division facts (1-12)): surviving statement is box 12 → Clara

$21 \div 3 = 7$ · $16 \div 2 = 8$ · $12 \div 12 = 1$ · $20 \div 2 = 10$ · $15 \div 5 = 3$ · $40 \div 8 = 5$ · $32 \div 8 = 4$ · $99 \div 9 = 11$ · $18 \div 9 = 2$ · $54 \div 6 = 9$ · $12 \div 2 = 6$