



The Great Sky Key Caper

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

Detective: _____ Date: _____

The Great Wind Key has been stolen from the Grand Cloud Palace! Without it, our floating islands will slowly sink into the foggy depths below. As a junior Sky Detective, you must track down the culprit before the islands lose their altitude.

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 sky bandit is _____

Possible suspects

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

NAME	MAIN FLIGHT GEAR	NAVIGATION TOOL	GLOVE DETAIL	HAIR STYLE	FOIL ITEM
Stormy Stella	grapple hook	map scroll	left handed glove	curly brown hair	tickle feathers
Gavin Glide	steam jetpack	pocket radar	right handed glove	curly brown hair	tickle feathers
Rusty Rotor	wind whistle	spyglass	right handed glove	curly brown hair	shiny mirrors
Zephyr Zoey	cloud glider	rope lasso	left handed glove	curly brown hair	shiny mirrors
Sky Racer Pip	cloud glider	map scroll	right handed glove	bright red hair	tickle feathers
Pilot Penny	cloud glider	spyglass	right handed glove	bright red hair	shiny mirrors
Barnaby Blue	steam jetpack	compass ring	right handed glove	curly brown hair	tickle feathers
Miles High	cloud glider	rope lasso	left handed glove	bright red hair	shiny mirrors
Navigator Nora	cloud glider	compass ring	left handed glove	curly brown hair	sticky honey
Cyrus Cloud	grapple hook	map scroll	left handed glove	curly brown hair	shiny mirrors
Skyler Sam	wind whistle	rope lasso	right handed glove	spiky yellow hair	sticky honey
Leo Loft	grapple hook	map scroll	left handed glove	bright red hair	tickle feathers
Fiona Float	steam jetpack	map scroll	right handed glove	spiky yellow hair	sticky honey
Cloud Scout Jax	gale boots	spyglass	right handed glove	bright red hair	tickle feathers
Dash Dynamo	grapple hook	map scroll	right handed glove	curly brown hair	tickle feathers
Wendy Wing	wind whistle	spyglass	right handed glove	curly brown hair	tickle feathers
Harper Helm	gale boots	pocket radar	left handed glove	curly brown hair	tickle feathers
Breezy Ben	wind whistle	compass ring	left handed glove	curly brown hair	shiny mirrors
Aria Swift	gale boots	map scroll	left handed glove	bright red hair	shiny mirrors
Gale Force Gus	cloud glider	rope lasso	right handed glove	bright red hair	shiny mirrors
Captain Barnaby	gale boots	rope lasso	right handed glove	curly brown hair	tickle feathers

Multiplication facts (1-12)

We inspect the dock. The airships are parked in neat rows. We count the cargo boxes in each row to unlock the security camera footage.

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

Diagram illustrating the multiplication table for the set $\{2, 4, 8, 16, 25, 32, 64, 77, 80, 96\}$. The table shows the product of elements from the set, with the result being the product of the two elements. The elements are arranged in two rows of boxes. The top row contains 12 boxes, and the bottom row contains 10 boxes. The numbers in the boxes are: 25, 132, 80, 9, 77, 2, 4, 18, 25, 4, 32, 80, 96 (top row) and 77, 7, 32, 3, 5, 80, 25, 35, 77, 4, 77, 35 (bottom row). The boxes containing 'T' are at positions (1, 1), (1, 9), (1, 11), and (2, 7).

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

$1 \times 4 = \boxed{} \rightarrow \mathbf{D}$

$$7 \times 5 = \boxed{} \rightarrow \boxed{\text{R}}$$

$1 \times 3 = \boxed{} \rightarrow \boxed{\text{C}}$

$11 \times 7 = \boxed{} \rightarrow \boxed{\text{A}}$

$9 \times 2 = \boxed{} \rightarrow \boxed{1}$

$3 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$1 \times 5 = \boxed{} \rightarrow \boxed{\text{K}}$

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

$$2 \times 1 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$3 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{U}}$$

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

$8 \times 10 = \boxed{} \rightarrow \boxed{\text{E}}$

$1 \times 7 = \boxed{} \rightarrow \boxed{\text{P}}$

$8 \times 12 = \square \rightarrow \mathbf{S}$

Scratch space:

CLUE 2

The radar screen is glitching. It only displays rounded distances to the nearest ten. We round the numbers to locate the runner's path.

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

The diagram consists of two rows of boxes. The top row has 15 boxes, and the bottom row has 10 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', number 9000
- Box 2: number 900
- Box 3: number 3000
- Box 4: number 6000
- Box 5: number 30
- Box 6: number 40
- Box 7: number 900
- Box 8: Shaded orange, contains 'T', number 9000
- Box 9: number 900
- Box 10: number 200
- Box 11: number 60
- Box 12: number 2000
- Box 13: number 3000
- Box 14: number 2000
- Box 15: number 40

Bottom row:

- Box 1: Shaded orange, contains 'T', number 9000
- Box 2: number 20
- Box 3: number 20
- Box 4: number 5000
- Box 5: Shaded orange, contains 'T', number 9000
- Box 6: number 900
- Box 7: number 3000
- Box 8: number 5000
- Box 9: number 3000
- Box 10: number 7000

Round 8,902 to the nearest thousand $\rightarrow$ **T**

Round 38 to the nearest ten $\rightarrow$ **G**

Round 5,831 to the nearest thousand $\rightarrow$ **R**

Round 922 to the nearest hundred $\rightarrow$ **H**

Round 3,115 to the nearest thousand → **E**

Round 190 to the nearest hundred $\rightarrow$ **A**

Round 22 to the nearest ten $\rightarrow$

Round 6,901 to the nearest thousand → **Y**

Round 2,337 to the nearest thousand $\rightarrow$ **D**

Round 58 to the nearest ten $\rightarrow$ **N**

Round 322 to the nearest hundred $\rightarrow$ **L**

Round 5,349 to the nearest thousand → **K**

Round 403 to the nearest hundred $\rightarrow$ **V**

Round 27 to the nearest ten $\rightarrow$

Scratch space:

CLUE 3 **Addition**

The Sky Patrol needs to stock up on emergency fuel. We add up all the coal canisters in the storage room to get their permission to search.

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

T									T										
304	639	492	510	790	773	967	773	560	304	662	773	402	410	772	560	432	773		
T																			
304	662	773	772	790	560	328	981	662											

$106 + 198 = \square \rightarrow \boxed{\text{T}}$	$155 + 355 = \square \rightarrow \boxed{\text{K}}$	$658 + 309 = \square \rightarrow \boxed{\text{F}}$
$213 + 197 = \square \rightarrow \boxed{\text{S}}$	$302 + 470 = \square \rightarrow \boxed{\text{M}}$	$505 + 476 = \square \rightarrow \boxed{\text{G}}$
$517 + 273 = \square \rightarrow \boxed{\text{L}}$	$232 + 328 = \square \rightarrow \boxed{\text{A}}$	$227 + 101 = \square \rightarrow \boxed{\text{U}}$
$304 + 335 = \square \rightarrow \boxed{\text{I}}$	$449 + 324 = \square \rightarrow \boxed{\text{E}}$	$259 + 143 = \square \rightarrow \boxed{\text{R}}$
$190 + 302 = \square \rightarrow \boxed{\text{C}}$	$254 + 178 = \square \rightarrow \boxed{\text{D}}$	$221 + 441 = \square \rightarrow \boxed{\text{H}}$

Scratch space:

CLUE 4 Subtraction

The thief dropped a bag of glowing cloud crystals. We subtract the crystals still in the bag from the total to see how many fell out.

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

A				A															
132	841	490	436	132	409	382	366	311	126	821	436	713	767	349	436	366	234	409	
	A				A														
592	132	217	436	234	132	841	713	211	311	490									

$153 - 21 = \square \rightarrow$ A	$1014 - 301 = \square \rightarrow$ L	$798 - 389 = \square \rightarrow$ N
$524 - 158 = \square \rightarrow$ O	$347 - 113 = \square \rightarrow$ W	$977 - 136 = \square \rightarrow$ S
$636 - 254 = \square \rightarrow$ D	$557 - 346 = \square \rightarrow$ E	$990 - 223 = \square \rightarrow$ Y
$248 - 31 = \square \rightarrow$ I	$691 - 201 = \square \rightarrow$ T	$787 - 195 = \square \rightarrow$ H
$697 - 386 = \square \rightarrow$ F	$389 - 263 = \square \rightarrow$ C	$703 - 267 = \square \rightarrow$ R
$620 - 271 = \square \rightarrow$ B	$1211 - 390 = \square \rightarrow$ U	

Scratch space:

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

The sky crew wants to share the remaining pilot snacks equally. We divide the treats to keep them happy so they will share their notes.

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:

$20 \div 4 = \boxed{}$

$28 \div 7 = \boxed{}$

$12 \div 4 = \boxed{}$

$12 \div 1 = \boxed{}$

$11 \div 1 = \boxed{}$

$40 \div 4 = \boxed{}$

$16 \div 2 = \boxed{}$

$56 \div 8 = \boxed{}$

$54 \div 9 = \boxed{}$

$8 \div 8 = \boxed{}$

$27 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain blasted off with a steam jetpack, then swung down using a rope lasso.
2. The villain blasted off with a steam jetpack, then found north using a compass ring.
3. The villain summoned gusts with a wind whistle, then spotted the escape path with a spyglass.
4. The villain swung with a grapple hook, then checked the escape route on a map scroll.
5. The villain dashed forward with gale boots, then swung down using a rope lasso.
6. The villain dashed forward with gale boots, then tracked guards with a pocket radar.
7. The villain summoned gusts with a wind whistle, then found north using a compass ring.
8. The villain swung with a grapple hook, then spotted the escape path with a spyglass.
9. The villain swung with a grapple hook, then tracked guards with a pocket radar.
10. The villain dashed forward with gale boots, then found north using a compass ring.
11. The villain blasted off with a steam jetpack, then tracked guards with a pocket radar.
12. The villain dashed forward with gale boots, then checked the escape route on a map scroll.

Answer Key

The Great Sky Key Caper

Culprit: Barnaby Blue

steam jetpack · compass ring · right handed glove · curly brown hair · tickle feathers

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE BANDIT DOES NOT USE A POCKET RADAR"

$5 \times 5 = 25$ (T) · $1 \times 4 = 4$ (D) · $7 \times 5 = 35$ (R) · $1 \times 3 = 3$ (C) · $11 \times 7 = 77$ (A) · $9 \times 2 = 18$ (I) · $3 \times 3 = 9$ (B) · $1 \times 5 = 5$ (K) · $12 \times 11 = 132$ (H) · $2 \times 1 = 2$ (N) · $3 \times 11 = 33$ (U) · $8 \times 4 = 32$ (O) · $8 \times 10 = 80$ (E) · $1 \times 7 = 7$ (P) · $8 \times 12 = 96$ (S)

Clue 2 (Rounding): "THE RIGHT HANDED GLOVE TOOK THE KEY"

Round 8,902 to the nearest thousand = 9000 (T) · Round 38 to the nearest ten = 40 (G) · Round 5,831 to the nearest thousand = 6000 (R) · Round 922 to the nearest hundred = 900 (H) · Round 3,115 to the nearest thousand = 3000 (E) · Round 190 to the nearest hundred = 200 (A) · Round 22 to the nearest ten = 20 (O) · Round 6,901 to the nearest thousand = 7000 (Y) · Round 2,337 to the nearest thousand = 2000 (D) · Round 58 to the nearest ten = 60 (N) · Round 322 to the nearest hundred = 300 (L) · Round 5,349 to the nearest thousand = 5000 (K) · Round 403 to the nearest hundred = 400 (V) · Round 27 to the nearest ten = 30 (I)

Clue 3 (Addition): "TICKLE FEATHERS MADE THEM LAUGH"

$106 + 198 = 304$ (T) · $155 + 355 = 510$ (K) · $658 + 309 = 967$ (F) · $213 + 197 = 410$ (S) · $302 + 470 = 772$ (M) · $505 + 476 = 981$ (G) · $517 + 273 = 790$ (L) · $232 + 328 = 560$ (A) · $227 + 101 = 328$ (U) · $304 + 335 = 639$ (I) · $449 + 324 = 773$ (E) · $259 + 143 = 402$ (R) · $190 + 302 = 492$ (C) · $254 + 178 = 432$ (D) · $221 + 441 = 662$ (H)

Clue 4 (Subtraction): "A STRAND OF CURLY BROWN HAIR WAS LEFT"

$153 - 21 = 132$ (A) · $1014 - 301 = 713$ (L) · $798 - 389 = 409$ (N) · $524 - 158 = 366$ (O) · $347 - 113 = 234$ (W) · $977 - 136 = 841$ (S) · $636 - 254 = 382$ (D) · $557 - 346 = 211$ (E) · $990 - 223 = 767$ (Y) · $248 - 31 = 217$ (I) · $691 - 201 = 490$ (T) · $787 - 195 = 592$ (H) · $697 - 386 = 311$ (F) · $389 - 263 = 126$ (C) · $703 - 267 = 436$ (R) · $620 - 271 = 349$ (B) · $1211 - 390 = 821$ (U)

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

$20 \div 4 = 5$ · $28 \div 7 = 4$ · $12 \div 4 = 3$ · $12 \div 1 = 12$ · $11 \div 1 = 11$ · $40 \div 4 = 10$ · $16 \div 2 = 8$ · $56 \div 8 = 7$ · $54 \div 9 = 6$ · $8 \div 8 = 1$ · $27 \div 3 = 9$