



The Great Sky-Island Chase

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

Detective: _____ **Date:** _____

The famous Gold-Gear Compass has been stolen from the high sky-dock! Chief Mechanic Barnaby needs our help to find the sneaky Sky Bandit before they fly away from Aero-Bay.

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	ESCAPE GEAR	GADGET USED	SECRET HABIT	HEADWEAR	BIGGEST FEAR
Propeller Penny	Grapple Hook	Net Shooter	Right-Handed	Green Bandana	Banana Peels
Jetpack Jack	Spring Shoes	Smoke Bombs	Left-Handed	Blue Goggles	Shiny Coins
Compass Carla	Propeller Hat	Smoke Bombs	Left-Handed	Red Helmet	Shiny Coins
Captain Clara	Glider Wings	Sparkler Wand	Right-Handed	Blue Goggles	Loud Noises
Gizmo Gary	Steam Jetpack	Net Shooter	Right-Handed	Blue Goggles	Shiny Coins
Cloudy Chloe	Glider Wings	Laser Pointer	Right-Handed	Green Bandana	Loud Noises
Balloon Bill	Steam Jetpack	Net Shooter	Right-Handed	Green Bandana	Banana Peels
Rotor Ron	Spring Shoes	Net Shooter	Right-Handed	Green Bandana	Loud Noises
Sprocket Sue	Spring Shoes	Flash Powder	Left-Handed	Blue Goggles	Shiny Coins
Zephyr Zach	Spring Shoes	Sparkler Wand	Left-Handed	Green Bandana	Shiny Coins
Gears Gabby	Propeller Hat	Laser Pointer	Right-Handed	Green Bandana	Banana Peels
Wings Wyatt	Grapple Hook	Sparkler Wand	Right-Handed	Green Bandana	Banana Peels
Drifter Dan	Spring Shoes	Laser Pointer	Right-Handed	Red Helmet	Banana Peels
Altitude Al	Steam Jetpack	Sparkler Wand	Right-Handed	Blue Goggles	Banana Peels
Bessie Barnstormer	Spring Shoes	Flash Powder	Left-Handed	Red Helmet	Banana Peels
Professor Pips	Steam Jetpack	Laser Pointer	Left-Handed	Blue Goggles	Banana Peels
Flyer Felix	Spring Shoes	Flash Powder	Left-Handed	Green Bandana	Banana Peels
Mechanic Max	Propeller Hat	Flash Powder	Right-Handed	Red Helmet	Loud Noises
Aero Amy	Spring Shoes	Laser Pointer	Right-Handed	Green Bandana	Banana Peels
Pilot Pete	Spring Shoes	Flash Powder	Left-Handed	Green Bandana	Loud Noises
Aviator Abby	Grapple Hook	Smoke Bombs	Right-Handed	Blue Goggles	Banana Peels

CLUE 1 Rounding

Our cloud radar can only estimate the bandit's speed. Round the sensor readings to find the first clue.

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

T								T								T
2000	230	3700	3000	7000	370	5000	290	2000	5000	170	3700	900	370	170	2000	
230	7000	2900	3700	7000	900	700	7000	300	130	430	3700	300	1300	7000	370	5000

Round 1,817 to the nearest thousand → **T**

Round 4,867 to the nearest thousand → **D**

Round 3,067 to the nearest thousand → **B**

Round 3,718 to the nearest hundred → **E**

Round 319 to the nearest hundred → **R**

Round 1,314 to the nearest hundred → **W**

Round 132 to the nearest ten → **K**

Round 433 to the nearest ten → **L**

Round 6,515 to the nearest thousand → **A**

Round 290 to the nearest ten → **I**

Round 668 to the nearest hundred → **P**

Round 882 to the nearest hundred → **S**

Round 2,888 to the nearest hundred → **V**

Round 232 to the nearest ten → **H**

Round 167 to the nearest ten → **O**

Round 368 to the nearest ten → **N**

Scratch space:

CLUE 2 Addition

Chief Barnaby found lists of stolen airship parts in two different hangars. Add them up to unlock the next clue.

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

T									T						T					
8665	9392	5461	5189	5762	7749	5654	9272	8665	7242	3056	5461	5654	8665	9392	5461	9272	4879			
				T									T							
4879	9272	8732	9392	8665	9392	5762	7749	5654	2801	8362	4879	8665	9392	5461	3975	5461	8081			

$5489 + 3176 = \square \rightarrow \mathbf{T}$	$2498 + 2963 = \square \rightarrow \mathbf{E}$	$3830 + 1932 = \square \rightarrow \mathbf{A}$
$863 + 1938 = \square \rightarrow \mathbf{F}$	$6050 + 3222 = \square \rightarrow \mathbf{I}$	$5007 + 4385 = \square \rightarrow \mathbf{H}$
$3676 + 5056 = \square \rightarrow \mathbf{G}$	$1849 + 1207 = \square \rightarrow \mathbf{S}$	$1552 + 3327 = \square \rightarrow \mathbf{R}$
$2107 + 1868 = \square \rightarrow \mathbf{K}$	$2524 + 5838 = \square \rightarrow \mathbf{O}$	$5163 + 2586 = \square \rightarrow \mathbf{N}$
$2944 + 2245 = \square \rightarrow \mathbf{B}$	$3859 + 3383 = \square \rightarrow \mathbf{U}$	$3920 + 4161 = \square \rightarrow \mathbf{Y}$
$1931 + 3723 = \square \rightarrow \mathbf{D}$		

Scratch space:

CLUE 3
Subtraction

The getaway glider dropped heavy iron weights to escape. Subtract the lost cargo weight to find where they went.

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

T																			
4838	5846	3881	8968	6714	1847	1847	6265	6714	5995	1955	1847	6714	6775	6775	3881	6551	6265	5995	6551
5992	3881	1847	1847	4018	5995	3530	6265	5995	6265	5995	6265	6775	3881	3881	1847	1955			

$7816 - 2978 = \square \rightarrow \boxed{\text{T}}$

$9499 - 531 = \square \rightarrow \boxed{\text{V}}$

$3137 - 1290 = \square \rightarrow \boxed{\text{L}}$

$11125 - 4411 = \square \rightarrow \boxed{\text{I}}$

$6173 - 2643 = \square \rightarrow \boxed{\text{B}}$

$8077 - 4196 = \square \rightarrow \boxed{\text{E}}$

$8759 - 2494 = \square \rightarrow \boxed{\text{A}}$

$8949 - 2174 = \square \rightarrow \boxed{\text{P}}$

$8439 - 1888 = \square \rightarrow \boxed{\text{D}}$

$9238 - 3243 = \square \rightarrow \boxed{\text{N}}$

$10538 - 4546 = \square \rightarrow \boxed{\text{F}}$

$5122 - 1104 = \square \rightarrow \boxed{\text{O}}$

$10345 - 4499 = \square \rightarrow \boxed{\text{H}}$

$2170 - 215 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

The thief ran through a maze of shipping crates stacked in equal rows. Multiply the crates to reveal their secret trail.

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

A								A			A		A			A	
55	22	25	48	48	9	63	55	9	132	55	9	55	6	55	56		
									A								
132	25	66	3	3	48	132	9	48	55	25	49	88	48				
A																	
55	96	25	56	88	96	3											

$5 \times 11 = \square \rightarrow$ A	$11 \times 8 = \square \rightarrow$ H	$8 \times 12 = \square \rightarrow$ I	
$8 \times 6 = \square \rightarrow$ E	$7 \times 9 = \square \rightarrow$ B	$11 \times 12 = \square \rightarrow$ D	
$1 \times 3 = \square \rightarrow$ P	$2 \times 11 = \square \rightarrow$ G	$6 \times 11 = \square \rightarrow$ O	
$7 \times 7 = \square \rightarrow$ T	$2 \times 3 = \square \rightarrow$ W	$1 \times 9 = \square \rightarrow$ N	$5 \times 5 = \square \rightarrow$ R
$7 \times 8 = \square \rightarrow$ S			

Scratch space:

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

We recovered a bag of sky-maps that must be shared equally among the search planes. Divide the maps to catch the bandit.

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:

$110 \div 10 = \boxed{}$

$80 \div 8 = \boxed{}$

$96 \div 8 = \boxed{}$

$64 \div 8 = \boxed{}$

$6 \div 1 = \boxed{}$

$54 \div 6 = \boxed{}$

$21 \div 3 = \boxed{}$

$6 \div 2 = \boxed{}$

$8 \div 8 = \boxed{}$

$24 \div 6 = \boxed{}$

$60 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain bounced over the rooftops with spring shoes, then fired a sticky net shooter.
2. The villain swung away on a grapple hook, then fired a sticky net shooter.
3. The villain drifted off using glider wings, then blinded the guards with flash powder.
4. The villain swung away on a grapple hook, then dropped thick smoke bombs.
5. The villain drifted off using glider wings, then waved a bright sparkler wand.
6. The villain zipped skyward wearing a propeller hat, then fired a sticky net shooter.
7. The villain zipped skyward wearing a propeller hat, then blinded the guards with flash powder.
8. The villain bounced over the rooftops with spring shoes, then dropped thick smoke bombs.
9. The villain drifted off using glider wings, then dropped thick smoke bombs.
10. The villain zoomed into the clouds with a steam jetpack, then fired a sticky net shooter.
11. The villain bounced over the rooftops with spring shoes, then tricked the radar with a laser pointer.
12. The villain zipped skyward wearing a propeller hat, then tricked the radar with a laser pointer.

Answer Key

The Great Sky-Island Chase

Culprit: Propeller Penny

Grapple Hook · Net Shooter · Right-Handed · Green Bandana · Banana Peels

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE BANDIT DOES NOT HAVE A SPARKLER WAND"

Round 1,817 to the nearest thousand = 2000 (T) · Round 4,867 to the nearest thousand = 5000 (D) · Round 3,067 to the nearest thousand = 3000 (B) · Round 3,718 to the nearest hundred = 3700 (E) · Round 319 to the nearest hundred = 300 (R) · Round 1,314 to the nearest hundred = 1300 (W) · Round 132 to the nearest ten = 130 (K) · Round 433 to the nearest ten = 430 (L) · Round 6,515 to the nearest thousand = 7000 (A) · Round 290 to the nearest ten = 290 (I) · Round 668 to the nearest hundred = 700 (P) · Round 882 to the nearest hundred = 900 (S) · Round 2,888 to the nearest hundred = 2900 (V) · Round 232 to the nearest ten = 230 (H) · Round 167 to the nearest ten = 170 (O) · Round 368 to the nearest ten = 370 (N)

Clue 2 (Addition): "THE BANDIT USED THEIR RIGHT HAND FOR THE KEY"

5489 + 3176 = 8665 (T) · 2498 + 2963 = 5461 (E) · 3830 + 1932 = 5762 (A) · 863 + 1938 = 2801 (F) · 6050 + 3222 = 9272 (I) · 5007 + 4385 = 9392 (H) · 3676 + 5056 = 8732 (G) · 1849 + 1207 = 3056 (S) · 1552 + 3327 = 4879 (R) · 2107 + 1868 = 3975 (K) · 2524 + 5838 = 8362 (O) · 5163 + 2586 = 7749 (N) · 2944 + 2245 = 5189 (B) · 3859 + 3383 = 7242 (U) · 3920 + 4161 = 8081 (Y) · 1931 + 3723 = 5654 (D)

Clue 3 (Subtraction): "THE VILLAIN SLIPPED AND FELL ON BANANA PEELS"

7816 - 2978 = 4838 (T) · 9499 - 531 = 8968 (V) · 3137 - 1290 = 1847 (L) · 11125 - 4411 = 6714 (I) · 6173 - 2643 = 3530 (B) · 8077 - 4196 = 3881 (E) · 8759 - 2494 = 6265 (A) · 8949 - 2174 = 6775 (P) · 8439 - 1888 = 6551 (D) · 9238 - 3243 = 5995 (N) · 10538 - 4546 = 5992 (F) · 5122 - 1104 = 4018 (O) · 10345 - 4499 = 5846 (H) · 2170 - 215 = 1955 (S)

Clue 4 (Multiplication facts (1-12)): "A GREEN BANDANA WAS DROPPED NEAR THE AIRSHIP"

5 × 11 = 55 (A) · 11 × 8 = 88 (H) · 8 × 12 = 96 (I) · 8 × 6 = 48 (E) · 7 × 9 = 63 (B) · 11 × 12 = 132 (D) · 1 × 3 = 3 (P) · 2 × 11 = 22 (G) · 6 × 11 = 66 (O) · 7 × 7 = 49 (T) · 2 × 3 = 6 (W) · 1 × 9 = 9 (N) · 5 × 5 = 25 (R) · 7 × 8 = 56 (S)

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

110 ÷ 10 = 11 · 80 ÷ 8 = 10 · 96 ÷ 8 = 12 · 64 ÷ 8 = 8 · 6 ÷ 1 = 6 · 54 ÷ 6 = 9 · 21 ÷ 3 = 7 · 6 ÷ 2 = 3 · 8 ÷ 8 = 1 · 24 ÷ 6 = 4 · 60 ÷ 12 = 5