



The Great Sky Heist

Grade 4 math · Multiplication, Word problems, Rounding, Multi-step word problems, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A sneaky Sky Bandit has stolen the legendary Golden Compass from the Chief Cartographer! We must search the floating islands, gather clues, and find the bandit before they sail away into the endless clouds.

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	SPECIAL TOOL	WRITING HAND	HAIR EVIDENCE	SECRET WEAKNESS
Oliver Orbit	bubble shield	sonic whistle	right-handed writer	bright green hair	sticky honey
Maya Cloud	rocket boots	clover charm	right-handed writer	bright green hair	tickle feather
Piper Pilot	wind blaster	fog lantern	right-handed writer	bright green hair	loud bell
Ben Breeze	grappling hook	fog lantern	left-handed writer	neon orange hair	loud bell
Jax Jetstream	wind blaster	sonic whistle	left-handed writer	neon orange hair	tickle feather
Toby Tempest	wind blaster	clover charm	right-handed writer	bright green hair	sticky honey
Rusty Rotor	glider pack	sonic whistle	right-handed writer	bright green hair	loud bell
Marco Polo	grappling hook	sonic whistle	right-handed writer	deep purple hair	loud bell
Finn Falcon	glider pack	clover charm	left-handed writer	bright green hair	sticky honey
Stella Storm	wind blaster	magnet glove	left-handed writer	bright green hair	sticky honey
Leo Windrunner	grappling hook	decoder lens	right-handed writer	bright green hair	sticky honey
Sally Ride	rocket boots	fog lantern	right-handed writer	bright green hair	sticky honey
Barnaby Blue	rocket boots	magnet glove	left-handed writer	bright green hair	sticky honey
Ivy Aero	rocket boots	clover charm	right-handed writer	neon orange hair	sticky honey
Zara Zephyr	wind blaster	clover charm	right-handed writer	neon orange hair	tickle feather
Captain Caleb	glider pack	fog lantern	left-handed writer	bright green hair	loud bell
Dash Danger	grappling hook	sonic whistle	right-handed writer	neon orange hair	sticky honey
Max Altitude	bubble shield	clover charm	left-handed writer	neon orange hair	tickle feather
Buzz Aldrin	glider pack	clover charm	left-handed writer	neon orange hair	sticky honey
Penny Propeller	rocket boots	clover charm	right-handed writer	bright green hair	sticky honey
Hazel Hawk	wind blaster	decoder lens	left-handed writer	deep purple hair	loud bell

CLUE 1 Multiplication facts (1-12)

We search the cargo bays first. The airships are loaded with rows of crates. Let us count them in equal groups to unlock our first clue.

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

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

$3 \times 11 = \boxed{} \rightarrow \boxed{\text{A}}$

$$2 \times 12 = \boxed{} \rightarrow \boxed{\text{H}}$$

$8 \times 11 = \boxed{} \rightarrow \boxed{1}$

$1 \times 7 = \square \rightarrow \boxed{\mathbf{E}}$

$7 \times 2 = \boxed{} \rightarrow \boxed{\text{U}}$

$1 \times 6 = \boxed{} \rightarrow \boxed{\text{R}}$

$11 \times 11 = \boxed{} \rightarrow \boxed{\text{F}}$

$7 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$3 \times 3 = \boxed{} \rightarrow \boxed{\text{D}}$

$1 \times 2 = \square \rightarrow \mathbf{S}$

$6 \times 9 = \boxed{} \rightarrow \boxed{0}$

$10 \times 12 = \boxed{} \rightarrow \boxed{\text{L}}$

$1 \times 12 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$$9 \times 7 = \boxed{} \rightarrow \boxed{\text{N}}$$

Scratch space:

CLUE 2

Word problems

A witness dropped their pilot logbook during the chase. We need to solve the word problems on the pages to reveal the next hint.

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

A witness saw the villain was

R									D	E	D	W	R				E	R
14	23	34	49	56	49	60	42					14	23	56			14	

There were 33 energy crystals. 19 were used up. How many energy crystals are left?

Answer: → **R**

There were 55 grappling ropes. 6 were used up. How many grappling ropes are left?

Answer: → **H**

Navigator found 6 golden gears yesterday and 28 more today. How many golden gears in all?

Answer: → **G**

There were 47 grappling ropes. 24 were used up. How many grappling ropes are left?

Answer: → **I**

Navigator lined up 6 rows of 7 grappling ropes. How many grappling ropes in all?

Answer: → **N**

Navigator found 16 spyglasses yesterday and 44 more today. How many spyglasses in all?

Answer: → **A**

Navigator found 36 sky maps yesterday and 20 more today. How many sky maps in all?

Answer: → **T**

Scratch space:

CLUE 3 Rounding

The tracking radar screen is fuzzy. It only shows rounded numbers of the flying ships. Let us round the distance to find the real path.

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

T																	
300	900	230	170	370	90	7000	700	300	200	370	9000	9000	2900	30	200	230	7000

			T										
170	130	9000	300	700	1700	5000	130	900	30	90	230	130	

Round 346 to the nearest hundred → **T**

Round 26 to the nearest ten → **O**

Round 926 to the nearest hundred → **H**

Round 373 to the nearest ten → **A**

Round 134 to the nearest ten → **Y**

Round 2,876 to the nearest hundred → **L**

Round 1,698 to the nearest hundred → **C**

Round 231 to the nearest ten → **E**

Round 173 to the nearest ten → **B**

Round 8,968 to the nearest thousand → **S**

Round 214 to the nearest hundred → **W**

Round 91 to the nearest ten → **N**

Round 7,330 to the nearest thousand → **D**

Round 5,348 to the nearest thousand → **K**

Round 744 to the nearest hundred → **I**

Scratch space:

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

We find a bag of stolen gold map pieces. To share them fairly among our crew, we must divide them up and read the final clue.

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:

$14 \div 7 = \boxed{}$

$90 \div 10 = \boxed{}$

$15 \div 3 = \boxed{}$

$11 \div 1 = \boxed{}$

$54 \div 9 = \boxed{}$

$28 \div 7 = \boxed{}$

$8 \div 1 = \boxed{}$

$11 \div 11 = \boxed{}$

$24 \div 2 = \boxed{}$

$49 \div 7 = \boxed{}$

$80 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain pushed back the guards with a wind blaster, then confused the guard dogs with a sonic whistle.
2. The villain blasted off using rocket boots, then escaped a trap thanks to a clover charm.
3. The villain swung away on a grappling hook, then cracked the safe with a decoder lens.
4. The villain pushed back the guards with a wind blaster, then cracked the safe with a decoder lens.
5. The villain pushed back the guards with a wind blaster, then escaped a trap thanks to a clover charm.
6. The villain soared through the clouds with a glider pack, then escaped a trap thanks to a clover charm.
7. The villain soared through the clouds with a glider pack, then snatched the compass using a magnet glove.
8. The villain pushed back the guards with a wind blaster, then hid in the dark with a fog lantern.
9. The villain rolled away inside a bubble shield, then confused the guard dogs with a sonic whistle.
10. The villain blasted off using rocket boots, then cracked the safe with a decoder lens.
11. The villain swung away on a grappling hook, then escaped a trap thanks to a clover charm.
12. The villain swung away on a grappling hook, then confused the guard dogs with a sonic whistle.

Answer Key

The Great Sky Heist

Culprit: Leo Windrunner

grappling hook · decoder lens · right-handed writer · bright green hair · sticky honey

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

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

$10 \times 11 = 110$ (T) · $3 \times 11 = 33$ (A) · $2 \times 12 = 24$ (H) · $8 \times 11 = 88$ (I) · $1 \times 7 = 7$ (E) · $7 \times 2 = 14$ (U) · $1 \times 6 = 6$ (R) · $11 \times 11 = 121$ (F) · $7 \times 3 = 21$ (G) · $3 \times 3 = 9$ (D) · $1 \times 2 = 2$ (S) · $6 \times 9 = 54$ (O) · $10 \times 12 = 120$ (L) · $1 \times 12 = 12$ (B) · $9 \times 7 = 63$ (N)

Clue 2 (Word problems): "RIGHT HANDED WRITER"

There were 33 energy crystals. 19 were used up. How many energy crystals are left? = 14 (R) · There were 55 grappling ropes. 6 were used up. How many grappling ropes are left? = 49 (H) · Navigator found 6 golden gears yesterday and 28 more today. How many golden gears in all? = 34 (G) · There were 47 grappling ropes. 24 were used up. How many grappling ropes are left? = 23 (I) · Navigator lined up 6 rows of 7 grappling ropes. How many grappling ropes in all? = 42 (N) · Navigator found 16 spyglasses yesterday and 44 more today. How many spyglasses in all? = 60 (A) · Navigator found 36 sky maps yesterday and 20 more today. How many sky maps in all? = 56 (T)

Clue 3 (Rounding): "THE BANDIT WAS SLOWED BY STICKY HONEY"

Round 346 to the nearest hundred = 300 (T) · Round 26 to the nearest ten = 30 (O) · Round 926 to the nearest hundred = 900 (H) · Round 373 to the nearest ten = 370 (A) · Round 134 to the nearest ten = 130 (Y) · Round 2,876 to the nearest hundred = 2900 (L) · Round 1,698 to the nearest hundred = 1700 (C) · Round 231 to the nearest ten = 230 (E) · Round 173 to the nearest ten = 170 (B) · Round 8,968 to the nearest thousand = 9000 (S) · Round 214 to the nearest hundred = 200 (W) · Round 91 to the nearest ten = 90 (N) · Round 7,330 to the nearest thousand = 7000 (D) · Round 5,348 to the nearest thousand = 5000 (K) · Round 744 to the nearest hundred = 700 (I)

Clue 4 (Multi-step word problems): "BRIGHT GREEN HAIR"

There were 100 spyglasses in all. 3 Sky Patrol used 16 spyglasses each. The other 2 Sky Patrol shared the rest equally. How many spyglasses did each of the other Sky Patrol get? = 26 (B) · Navigator earned 3 energy crystals in each of 4 rounds, plus 87 bonus energy crystals. Then 14 energy crystals were lost. How many energy crystals are left? = 85 (R) · Navigator collected 37 grappling ropes in the morning and 77 grappling ropes in the afternoon, then split them equally among 3 Sky Patrol. How many grappling ropes did each get? = 38 (E) · There were 151 spyglasses in all. 25 spyglasses were set aside. The rest were shared equally among 9 Sky Patrol. How many spyglasses did each get? = 14 (H) · Navigator earned 4 energy crystals in each of 3 rounds, plus 4 bonus energy crystals. Then 4 energy crystals were lost. How many energy crystals are left? = 12 (I) · There were 409 energy crystals in all. 2 Sky Patrol used 7 energy crystals each. The other 5 Sky Patrol shared the rest equally. How many energy crystals did each of the other Sky Patrol get? = 79 (T) · There were 318 sky maps in all. 1 Sky Patrol used 18 sky maps each. The other 6 Sky Patrol shared the rest equally. How many sky maps did each of the other Sky Patrol get? = 50 (G)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Leo Windrunner

$14 \div 7 = 2$ · $90 \div 10 = 9$ · $15 \div 3 = 5$ · $11 \div 1 = 11$ · $54 \div 9 = 6$ · $28 \div 7 = 4$ · $8 \div 1 = 8$ · $11 \div 11 = 1$ · $24 \div 2 = 12$ · $49 \div 7 = 7$ · $80 \div 8 = 10$