



The Mystery of the Sky Port Compass

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

Detective: _____ **Date:** _____

A sneaky Sky Bandit has stolen the Golden Compass from the Sky Port archives! We must find out who did it before they fly away into the 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	SKY GEAR	ESCAPE TRICK	COMPASS GRIP	HAIR COLOR	SCARE TACTIC
Gale Force	wind glider	noisemaker	right handed grip	sunset orange hair	tickle feathers
Sally Ride	rocket boots	smoke bombs	right handed grip	storm grey hair	sneeze powder
Anne Bonny	rocket boots	flash powder	left handed grip	storm grey hair	banana peels
Roald Amundsen	magnetic gloves	flash powder	left handed grip	storm grey hair	sneeze powder
Jacques Cousteau	rocket boots	smoke bombs	left handed grip	sunset orange hair	banana peels
Blackbeard	grappling hook	smoke bombs	left handed grip	sunset orange hair	tickle feathers
Captain Kidd	magnetic gloves	smoke bombs	right handed grip	sunset orange hair	banana peels
Dusty Trail	steam jetpack	net launcher	right handed grip	sunset orange hair	tickle feathers
Sunny Skies	magnetic gloves	net launcher	right handed grip	cloud white hair	banana peels
Amelia Earhart	magnetic gloves	flash powder	left handed grip	cloud white hair	tickle feathers
Sir Francis	rocket boots	flash powder	right handed grip	cloud white hair	banana peels
Penny Pilot	grappling hook	noisemaker	right handed grip	sunset orange hair	banana peels
Mary Read	magnetic gloves	net launcher	right handed grip	sunset orange hair	banana peels
Dora Explorer	wind glider	bubble shield	left handed grip	storm grey hair	tickle feathers
Stormy Sam	magnetic gloves	bubble shield	right handed grip	sunset orange hair	banana peels
Leif Erikson	grappling hook	bubble shield	left handed grip	storm grey hair	tickle feathers
Steve Irwin	wind glider	net launcher	right handed grip	cloud white hair	sneeze powder
Buzz Aldrin	grappling hook	bubble shield	right handed grip	sunset orange hair	banana peels
Mae Jemison	rocket boots	smoke bombs	right handed grip	sunset orange hair	banana peels
Neil Armstrong	steam jetpack	flash powder	left handed grip	sunset orange hair	tickle feathers
Barnaby Blue	magnetic gloves	smoke bombs	right handed grip	cloud white hair	sneeze powder

CLUE 1

Our airship radar is old and rusty. It only shows rounded numbers. We rounded the distance to the nearest ten miles to find the bandit's hideout!

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

Round 79 to the nearest ten $\rightarrow$ **T**

Round 467 to the nearest hundred $\rightarrow$ **A**

Round 47 to the nearest ten $\rightarrow$ **S**

Round 1,903 to the nearest thousand → **E**

Round 427 to the nearest hundred $\rightarrow$

Round 66 to the nearest ten $\rightarrow$ **U**

Round 22 to the nearest ten $\rightarrow$ **0**

Round 4,720 to the nearest thousand → **B**

Round 7,601 to the nearest thousand $\rightarrow$ **D**

Round 236 to the nearest hundred $\rightarrow$ **L**

Round 711 to the nearest hundred → **N**

Round 6,665 to the nearest thousand → **H**

Scratch space:

CLUE 2

Captain Barnaby counted the golden map pieces left behind. We added the small pile of shiny brass keys to the total to find the next path.

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

743 848 682 480 936 566 682 805 848 642 379 805 929 785 793 307 848 743

848 929 700 651 682 651 307 785 793 375

$$456 + 287 = \boxed{} \rightarrow \boxed{\text{T}}$$

$110 + 197 = \boxed{} \rightarrow \boxed{\text{G}}$

$200 + 179 = \square \rightarrow \boxed{\mathbf{W}}$

$$528 + 277 = \boxed{} \rightarrow \boxed{\text{S}}$$

$410 + 232 = \boxed{} \rightarrow \boxed{\text{O}}$

$$309 + 257 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$267 + 581 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$229 + 453 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$364 + 565 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$$459 + 241 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$186 + 189 = \boxed{} \rightarrow \boxed{\text{P}}$$

$294 + 186 = \boxed{} \rightarrow \boxed{\text{C}}$

$$528 + 257 = \boxed{} \rightarrow \boxed{\text{R}}$$

$251 + 542 = \square \rightarrow \boxed{\text{I}}$

$$389 + 262 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$469 + 467 = \boxed{} \rightarrow \boxed{\text{L}}$$

Scratch space:

CLUE 3 Subtraction

The thief cut our anchor ropes! We subtracted the broken pieces of rope from our supply chest to see how much gear we lost.

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

W																	
780	573	362	231	179	764	764	573	506	232	494	573	297	635	466	506	179	232
410	764	825	466	297	635	466	635	466	635	764	573	573	231	362			

$830 - 50 = \square \rightarrow \text{W}$	$236 - 4 = \square \rightarrow \text{T}$	$619 - 125 = \square \rightarrow \text{H}$
$847 - 381 = \square \rightarrow \text{N}$	$302 - 123 = \square \rightarrow \text{I}$	$549 - 187 = \square \rightarrow \text{S}$
$722 - 87 = \square \rightarrow \text{A}$	$242 - 11 = \square \rightarrow \text{L}$	$1124 - 360 = \square \rightarrow \text{P}$
$780 - 207 = \square \rightarrow \text{E}$	$574 - 68 = \square \rightarrow \text{D}$	$468 - 58 = \square \rightarrow \text{U}$
$871 - 46 = \square \rightarrow \text{O}$	$636 - 339 = \square \rightarrow \text{B}$	

Scratch space:

Multiplication facts (1-12)

We found rows of supply boxes stacked neat and tidy on the deck. We multiplied the rows of crates to count the total bandit gear.

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

56 45 63 15 33 54 5 54 6 120 60 60 63 90 56

11 3 6 11 63 56 144 33 120 6 25 63 45 120 54 33

88 63 45 54 6 50

$8 \times 7 = \boxed{} \rightarrow \boxed{\text{T}}$

$9 \times 7 = \square \rightarrow \mathbf{E}$

$5 \times 3 = \square \rightarrow \boxed{\mathbf{C}}$

$10 \times 5 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$1 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{U}}$

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

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

$6 \times 10 = \boxed{} \rightarrow \boxed{\text{L}}$

$$5 \times 9 = \boxed{} \rightarrow \boxed{\text{H}}$$

$11 \times 8 = \boxed{} \rightarrow \boxed{\text{B}}$

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

$$5 \times 5 = \boxed{} \rightarrow \boxed{\mathbf{G}}$$

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

$10 \times 9 = \boxed{} \rightarrow$

$1 \times 5 = \square \rightarrow \boxed{\mathbf{M}}$

$12 \times 12 = \boxed{} \rightarrow \boxed{}$

$11 \times 3 = \square \rightarrow$

Scratch space:

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

To catch the thief, the crew shared the magic compass lenses. We shared them equally among all the scouts to cover every sky island.

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:

$10 \div 5 = \boxed{}$

$80 \div 10 = \boxed{}$

$66 \div 6 = \boxed{}$

$10 \div 1 = \boxed{}$

$36 \div 4 = \boxed{}$

$20 \div 5 = \boxed{}$

$15 \div 3 = \boxed{}$

$49 \div 7 = \boxed{}$

$96 \div 8 = \boxed{}$

$1 \div 1 = \boxed{}$

$42 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain blasted off with a steam jetpack, then protected themselves with a bubble shield.
2. The villain climbed up using magnetic gloves, then trapped the purser in a net launcher.
3. The villain swung in on a grappling hook, then distracted everyone with a noisemaker.
4. The villain blasted off with a steam jetpack, then trapped the purser in a net launcher.
5. The villain swung in on a grappling hook, then protected themselves with a bubble shield.
6. The villain swung in on a grappling hook, then trapped the purser in a net launcher.
7. The villain blasted off with a steam jetpack, then distracted everyone with a noisemaker.
8. The villain climbed up using magnetic gloves, then dropped sneaky smoke bombs.
9. The villain swooped down using a wind glider, then distracted everyone with a noisemaker.
10. The villain swooped down using a wind glider, then protected themselves with a bubble shield.
11. The villain zoomed past on rocket boots, then dropped sneaky smoke bombs.
12. The villain zoomed past on rocket boots, then protected themselves with a bubble shield.

Answer Key

The Mystery of the Sky Port Compass

Culprit: Penny Pilot

grappling hook · noisemaker · right handed grip · sunset orange hair · banana peels

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE BANDIT DOES NOT USE A BUBBLE SHIELD"

Round 79 to the nearest ten = 80 (T) · Round 467 to the nearest hundred = 500 (A) · Round 47 to the nearest ten = 50 (S) · Round 1,903 to the nearest thousand = 2000 (E) · Round 427 to the nearest hundred = 400 (I) · Round 66 to the nearest ten = 70 (U) · Round 22 to the nearest ten = 20 (O) · Round 4,720 to the nearest thousand = 5000 (B) · Round 7,601 to the nearest thousand = 8000 (D) · Round 236 to the nearest hundred = 200 (L) · Round 711 to the nearest hundred = 700 (N) · Round 6,665 to the nearest thousand = 7000 (H)

Clue 2 (Addition): "THE CLUE SHOWS A RIGHT HANDED GRIP"

$456 + 287 = 743$ (T) · $110 + 197 = 307$ (G) · $200 + 179 = 379$ (W) · $528 + 277 = 805$ (S) · $410 + 232 = 642$ (O) · $309 + 257 = 566$ (U) · $267 + 581 = 848$ (H) · $229 + 453 = 682$ (E) · $364 + 565 = 929$ (A) · $459 + 241 = 700$ (N) · $186 + 189 = 375$ (P) · $294 + 186 = 480$ (C) · $528 + 257 = 785$ (R) · $251 + 542 = 793$ (I) · $389 + 262 = 651$ (D) · $469 + 467 = 936$ (L)

Clue 3 (Subtraction): "WE SLIPPED THE BANDIT UP ON BANANA PEELS"

$830 - 50 = 780$ (W) · $236 - 4 = 232$ (T) · $619 - 125 = 494$ (H) · $847 - 381 = 466$ (N) · $302 - 123 = 179$ (I) · $549 - 187 = 362$ (S) · $722 - 87 = 635$ (A) · $242 - 11 = 231$ (L) · $1124 - 360 = 764$ (P) · $780 - 207 = 573$ (E) · $574 - 68 = 506$ (D) · $468 - 58 = 410$ (U) · $871 - 46 = 825$ (O) · $636 - 339 = 297$ (B)

Clue 4 (Multiplication facts (1-12)): "THE CRIMINAL LEFT SUNSET ORANGE HAIR BEHIND"

$8 \times 7 = 56$ (T) · $9 \times 7 = 63$ (E) · $5 \times 3 = 15$ (C) · $10 \times 5 = 50$ (D) · $1 \times 3 = 3$ (U) · $6 \times 9 = 54$ (I) · $6 \times 1 = 6$ (N) · $6 \times 10 = 60$ (L) · $5 \times 9 = 45$ (H) · $11 \times 8 = 88$ (B) · $1 \times 11 = 11$ (S) · $5 \times 5 = 25$ (G) · $10 \times 12 = 120$ (A) · $10 \times 9 = 90$ (F) · $1 \times 5 = 5$ (M) · $12 \times 12 = 144$ (O) · $11 \times 3 = 33$ (R)

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

$10 \div 5 = 2$ · $80 \div 10 = 8$ · $66 \div 6 = 11$ · $10 \div 1 = 10$ · $36 \div 4 = 9$ · $20 \div 5 = 4$ · $15 \div 3 = 5$ · $49 \div 7 = 7$ · $96 \div 8 = 12$ · $1 \div 1 = 1$ · $42 \div 7 = 6$