



The Cloud Canopy Heist

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 3-4

Detective: _____ Date: _____

Someone has swiped the Golden Wind-Key from the Cloud Keep! Without it, the floating islands will drift away. The Chief Cloud Keeper needs your help to catch the sneaky Sky Bandit before they escape the gusty skies.

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	AIRSHIP GEAR	SKY MAGIC	STEERING HAND	HAIR COLOR	DISTRACTION
Finn Falcon	Turbo Booster	Zephyr Blast	Left-Handed Steerer	Bright Pink Hair	Fresh Donuts
Gale Force	Cloud Net	Echo Whistle	Left-Handed Steerer	Sunny Yellow Hair	Shiny Coins
Cloudy Clara	Cloud Net	Mist Cloak	Left-Handed Steerer	Bright Pink Hair	Shiny Coins
Sunny Sue	Wind Compass	Mist Cloak	Left-Handed Steerer	Sunny Yellow Hair	Fresh Donuts
Captain Barnaby	Turbo Booster	Zephyr Blast	Right-Handed Steerer	Sunny Yellow Hair	Fresh Donuts
Oliver Owl	Wind Compass	Echo Whistle	Right-Handed Steerer	Bright Pink Hair	Shiny Coins
Amelia Airheart	Glider Wings	Spark Strike	Right-Handed Steerer	Neon Blue Hair	Squeaky Toys
Dusty Dan	Cloud Net	Echo Whistle	Left-Handed Steerer	Bright Pink Hair	Shiny Coins
Vasco de Cloud	Grappling Hook	Echo Whistle	Left-Handed Steerer	Bright Pink Hair	Shiny Coins
Piper Plume	Grappling Hook	Spark Strike	Right-Handed Steerer	Sunny Yellow Hair	Fresh Donuts
Windy Wendy	Grappling Hook	Gale Shield	Left-Handed Steerer	Bright Pink Hair	Shiny Coins
Penny Pinwheel	Cloud Net	Spark Strike	Left-Handed Steerer	Bright Pink Hair	Shiny Coins
Zack Zephyr	Turbo Booster	Zephyr Blast	Left-Handed Steerer	Neon Blue Hair	Fresh Donuts
Breezy Bob	Turbo Booster	Echo Whistle	Left-Handed Steerer	Neon Blue Hair	Squeaky Toys
Sailor Sally	Wind Compass	Mist Cloak	Left-Handed Steerer	Sunny Yellow Hair	Squeaky Toys
Marco Polo	Wind Compass	Echo Whistle	Right-Handed Steerer	Sunny Yellow Hair	Squeaky Toys
Stormy Sam	Turbo Booster	Gale Shield	Left-Handed Steerer	Neon Blue Hair	Squeaky Toys
Brooke Breeze	Wind Compass	Gale Shield	Left-Handed Steerer	Bright Pink Hair	Fresh Donuts
Hazel Hawk	Turbo Booster	Zephyr Blast	Right-Handed Steerer	Bright Pink Hair	Fresh Donuts
Jet Jax	Turbo Booster	Gale Shield	Right-Handed Steerer	Bright Pink Hair	Fresh Donuts
Cody Condor	Grappling Hook	Spark Strike	Right-Handed Steerer	Sunny Yellow Hair	Squeaky Toys

CLUE 1

To unlock the first secret diary, we need to read a broken sky-radar. The buttons are scrambled by ones, tens, and hundreds!

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

Diagram showing two rows of boxes with numbers. The top row has 16 boxes, and the bottom row has 10 boxes. The first box in the top row and the 11th box in the top row are highlighted in orange and contain the letter 'T'. The numbers below the boxes are: Top row: 32, 25, 67, 56, 11, 95, 91, 81, 32, 91, 22, 67, 40, 95, 22, 32, 70, 40, 67. Bottom row: 52, 11, 88, 67, 40, 25, 81, 67, 88, 91.

What number has 3 tens and 2 ones? → **T**

What number has 1 ten and 1 one? → **A**

What number has 8 tens and 8 ones? → **L**

What number has 2 tens and 2 ones? → ☐

What number has 4 tens and 0 ones? → **S**

What number has 5 tens and 2 ones? → **G**

What number has 2 tens and 5 ones? → **H**

What number has 8 tens and 1 one? →

1

What number has 6 tens and 7 ones? → **E**

What number has 5 tens and 6 ones? → **B**

What number has 9 tens and 5 ones? → **N**

What number has 9 tens and 1 one? → **D**

What number has 7 tens and 0 ones? → **U**

Scratch space:

CLUE 2 **Addition**

We found a pile of dropped cloud-crystals! If we add the blue crystals to the green crystals, we will know which way the bandit fled.

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

Diagram illustrating a memory layout with three rows of boxes. The boxes are arranged in three rows, with the first row containing 18 boxes and the subsequent two rows containing 10 boxes each. The values in the boxes are as follows:

70	52	80	60	80	43	70	52	97	71	94	80	94	28	70	80	80	26	80	26
60	80	43	70	97	38	97	26	31											
60	80	43	70	97	38	97	26	31											

The boxes containing the value 70 are highlighted in orange and labeled with a 'T'.

$$38 + 32 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$8 + 18 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$$53 + 41 = \boxed{} \rightarrow \mathbf{D}$$

$20 + 11 = \boxed{} \rightarrow \mathbf{K}$

$38 + 59 = \boxed{} \rightarrow \boxed{\text{A}}$

$$42 + 38 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$18 + 34 = \boxed{} \rightarrow \boxed{\text{H}}$$

$39 + 32 = \boxed{} \rightarrow \boxed{\text{N}}$

$18 + 20 = \boxed{} \rightarrow \boxed{\text{M}}$

$$20 + 40 = \boxed{} \rightarrow \boxed{\text{L}}$$

$12 + 31 = \boxed{} \rightarrow \boxed{\text{F}}$

$$14 + 14 = \boxed{} \rightarrow \boxed{\text{S}}$$

Scratch space:

CLUE 3

Our airship's balloon is leaking helium! We must subtract the lost fuel from our total to see if we can still reach the next island.

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

Diagram illustrating a 3xN grid structure with 15 columns. The grid is composed of three rows of boxes. The first row contains 15 boxes, the second row contains 5 boxes, and the third row contains 5 boxes. The boxes are arranged in a staggered pattern, with the first row starting at column 1, the second row starting at column 2, and the third row starting at column 3. The boxes are labeled with numbers below them. The first row labels are 61, 23, 54, 19, 22, 24, 73, 85, 61, 82, 42, 89, 54, 75, 75, 23, 85, 24, 35. The second row labels are 39, 42, 85, 24, 75. The third row labels are 39, 42, 85, 24, 75. The boxes at (1,1), (1,9), (1,15), (2,2), and (2,6) are shaded orange and contain the letter 'T'.

$82 - 21 = \boxed{} \rightarrow \boxed{\text{T}}$

$31 - 12 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$100 - 15 = \boxed{} \rightarrow \boxed{\text{I}}$

$$52 - 10 = \boxed{} \rightarrow \boxed{0}$$

$51 - 29 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$93 - 20 = \boxed{} \rightarrow \boxed{\text{D}}$

$$24 - 1 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$68 - 14 = \boxed{} \rightarrow \boxed{\mathbf{E}}$$

$54 - 30 = \boxed{} \rightarrow \boxed{\text{N}}$

$$83 - 1 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$103 - 28 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$57 - 18 = \boxed{} \rightarrow \boxed{\text{C}}$$

$119 - 30 = \boxed{} \rightarrow \boxed{\mathbf{V}}$

$67 - 32 = \boxed{} \rightarrow \boxed{\text{Y}}$

Scratch space:

CLUE 4 Skip counting

To cross the rickety rope bridge safely, we have to step only on the planks numbered by skip-counting by fives.

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

T								T										
110	28	26	42	10	30	28	110	10	22	30	27	39	22	15	10	130	14	42
21	130	10	30	28	110	90	10	22	140	28	24	10	130					

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **K**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **E**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **I**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **H**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **R**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **O**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 → **C**

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **G**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 → **F**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 → **S**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 → **P**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 → **N**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **B**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **M**

Scratch space:

CLUE 5**Missing addends - the last clue**

The gear locker is half-empty. We know how many sky-maps we had, so we must find out how many are missing to get the clues.

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:

$4 + \underline{\quad} = 16$

$8 + \underline{\quad} = 19$

$3 + \underline{\quad} = 9$

$5 + \underline{\quad} = 6$

$9 + \underline{\quad} = 13$

$2 + \underline{\quad} = 7$

$3 + \underline{\quad} = 10$

$2 + \underline{\quad} = 12$

$3 + \underline{\quad} = 6$

$5 + \underline{\quad} = 14$

$2 + \underline{\quad} = 4$

Step 2 - cross out the sentence with each answer:

1. The villain zips past the guard towers, then drops a map of the secret cove.
2. The villain scoops up the shiny wind crystals, then vanishes into a puffy cloud.
3. The villain flies the glider through the fog, then zooms away on a jetstream.
4. The villain zips past the guard towers, then vanishes into a puffy cloud.
5. The villain zips past the guard towers, then leaves behind a trail of sparkles.
6. The villain scoops up the shiny wind crystals, then laughs in a high-pitched voice.
7. The villain swings across the main sail, then vanishes into a puffy cloud.
8. The villain scoops up the shiny wind crystals, then drops a map of the secret cove.
9. The villain drops a smoke bomb on the deck, then vanishes into a puffy cloud.
10. The villain flies the glider through the fog, then vanishes into a puffy cloud.
11. The villain flies the glider through the fog, then drops a map of the secret cove.
12. The villain scoops up the shiny wind crystals, then zooms away on a jetstream.

Answer Key

The Cloud Canopy Heist

Culprit: Dusty Dan

Cloud Net · Echo Whistle · Left-Handed Steerer · Bright Pink Hair · Shiny Coins

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

Clue 1 (Place value): "THE BANDIT DOES NOT USE GALE SHIELD"

What number has 3 tens and 2 ones? = 32 (T) · What number has 1 ten and 1 one? = 11 (A) · What number has 8 tens and 8 ones? = 88 (L) · What number has 2 tens and 2 ones? = 22 (O) · What number has 4 tens and 0 ones? = 40 (S) · What number has 5 tens and 2 ones? = 52 (G) · What number has 2 tens and 5 ones? = 25 (H) · What number has 8 tens and 1 one? = 81 (I) · What number has 6 tens and 7 ones? = 67 (E) · What number has 5 tens and 6 ones? = 56 (B) · What number has 9 tens and 5 ones? = 95 (N) · What number has 9 tens and 1 one? = 91 (D) · What number has 7 tens and 0 ones? = 70 (U)

Clue 2 (Addition): "THE LEFT HANDED STEERER LEFT A MARK"

$38 + 32 = 70$ (T) · $8 + 18 = 26$ (R) · $53 + 41 = 94$ (D) · $20 + 11 = 31$ (K) · $38 + 59 = 97$ (A) · $42 + 38 = 80$ (E) · $18 + 34 = 52$ (H) · $39 + 32 = 71$ (N) · $18 + 20 = 38$ (M) · $20 + 40 = 60$ (L) · $12 + 31 = 43$ (F) · $14 + 14 = 28$ (S)

Clue 3 (Subtraction): "THE BANDIT LOVES SHINY COINS"

$82 - 21 = 61$ (T) · $31 - 12 = 19$ (B) · $100 - 15 = 85$ (I) · $52 - 10 = 42$ (O) · $51 - 29 = 22$ (A) · $93 - 20 = 73$ (D) · $24 - 1 = 23$ (H) · $68 - 14 = 54$ (E) · $54 - 30 = 24$ (N) · $83 - 1 = 82$ (L) · $103 - 28 = 75$ (S) · $57 - 18 = 39$ (C) · $119 - 30 = 89$ (V) · $67 - 32 = 35$ (Y)

Clue 4 (Skip counting): "THE SIGHTING CONFIRMS BRIGHT PINK HAIR"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (K) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (R) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (C) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (F) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (B) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (M)

Clue 5 (Missing addends): surviving statement is box 8 → Dusty Dan

$4 + \underline{\quad} = 16 = 12$ · $8 + \underline{\quad} = 19 = 11$ · $3 + \underline{\quad} = 9 = 6$ · $5 + \underline{\quad} = 6 = 1$ · $9 + \underline{\quad} = 13 = 4$ · $2 + \underline{\quad} = 7 = 5$ · $3 + \underline{\quad} = 10 = 7$ · $2 + \underline{\quad} = 12 = 10$ · $3 + \underline{\quad} = 6 = 3$ · $5 + \underline{\quad} = 14 = 9$ · $2 + \underline{\quad} = 4 = 2$