



The Great Balloon Mystery

Grade 3 math · Place value, Subtraction, Multiplication, Rounding, Division · Reading level grades 1-2

Detective: _____ Date: _____

The sky is bright with colorful balloons. But oh no! The biggest hot air balloon has been popped. Detective, we need to find the Balloon Bandit and save the fiesta!

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 Balloon Bandit is _____

Possible suspects

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

NAME	FIESTA FLIGHT TRICK	DESERT SCOUTING GEAR	WRIST WATCH COLOR	BALLOON CREW HAIR	DESERT FEAR
Rosie	riding a fast roadrunner	using a pocket compass	wears a yellow watch	desert black hair	windy weather
Otis	riding a fast roadrunner	holding a prickly pear	wears a yellow watch	desert black hair	chili pepper sneeze
Sunny	climbing the Sandia tram	wearing giant sunglasses	wears a green watch	desert black hair	prickly cactus
Buster	riding a fast roadrunner	using a pocket compass	wears a green watch	chili red hair	prickly cactus
Arturo	flying a hot air balloon	wearing a silver buckle	wears a green watch	desert black hair	chili pepper sneeze
Billy	finding hidden turquoise	wearing giant sunglasses	wears a green watch	sandy blonde hair	windy weather
Elena	climbing the Sandia tram	wearing giant sunglasses	wears a green watch	desert black hair	windy weather
Clara	flying a hot air balloon	using a pocket compass	wears a yellow watch	chili red hair	prickly cactus
Mateo	flying a hot air balloon	wearing giant sunglasses	wears a green watch	chili red hair	prickly cactus
Sandy	flying a hot air balloon	using a pocket compass	wears a yellow watch	desert black hair	windy weather
Lola	flying a hot air balloon	wearing a silver buckle	wears a green watch	desert black hair	prickly cactus
Rudy	climbing the Sandia tram	wearing a silver buckle	wears a green watch	desert black hair	prickly cactus
Paco	climbing the Sandia tram	carrying a desert map	wears a yellow watch	desert black hair	windy weather
Rita	finding hidden turquoise	carrying a desert map	wears a green watch	sandy blonde hair	windy weather
Hank	glowing like neon lights	wearing a silver buckle	wears a yellow watch	chili red hair	windy weather
Penny	glowing like neon lights	holding a prickly pear	wears a yellow watch	desert black hair	windy weather
Joni	flying a hot air balloon	carrying a desert map	wears a yellow watch	chili red hair	windy weather
Manny	riding a fast roadrunner	using a pocket compass	wears a green watch	desert black hair	chili pepper sneeze
Sofia	climbing the Sandia tram	carrying a desert map	wears a yellow watch	desert black hair	chili pepper sneeze
Diego	flying a hot air balloon	holding a prickly pear	wears a yellow watch	sandy blonde hair	prickly cactus
Gaby	riding a fast roadrunner	carrying a desert map	wears a yellow watch	desert black hair	windy weather

CLUE 1 Place value

We look at the big balloon tickets. Let us find the hundreds place to get our first clue.

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

T									T								T
500	60	50	7000	4000	20	5000	700	500	5000	400	50	8000	20	400	500		
60	400	90	5000	4000	80	6000	700	800	40	90	3000	80	50	4000	6000		

What is the value of the 5 in 6,587? → **T**

What is the value of the 8 in 58,624? → **S**

What is the value of the 7 in 742? → **I**

What is the value of the 6 in 6,302? → **R**

What is the value of the 6 in 765? → **H**

What is the value of the 7 in 7,085? → **B**

What is the value of the 5 in 952? → **E**

What is the value of the 8 in 983? → **P**

What is the value of the 9 in 5,391? → **L**

What is the value of the 4 in 54,618? → **A**

What is the value of the 2 in 8,127? → **N**

What is the value of the 3 in 3,067? → **Y**

What is the value of the 5 in 5,627? → **D**

What is the value of the 8 in 7,842? → **C**

What is the value of the 4 in 340? → **K**

What is the value of the 4 in 8,470? → **O**

Scratch space:

CLUE 2

Subtraction

Some desert maps blew away in the wind. We subtract the lost maps to find the next hint.

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

T									T						
867	764	676	859	428	859	119	676	252	867	886	676	395	312	859	395

								T		
819	676	763	763	742	886	886	395	867	252	764

$971 - 104 = \square \rightarrow \boxed{\text{T}}$

$1123 - 381 = \square \rightarrow \boxed{\text{O}}$

$1098 - 335 = \square \rightarrow \boxed{\text{L}}$

$861 - 97 = \square \rightarrow \boxed{\text{H}}$

$305 - 53 = \square \rightarrow \boxed{\text{C}}$

$986 - 100 = \square \rightarrow \boxed{\text{W}}$

$424 - 305 = \square \rightarrow \boxed{\text{P}}$

$648 - 220 = \square \rightarrow \boxed{\text{U}}$

$1045 - 186 = \square \rightarrow \boxed{\text{S}}$

$475 - 163 = \square \rightarrow \boxed{\text{R}}$

$436 - 41 = \square \rightarrow \boxed{\text{A}}$

$701 - 25 = \square \rightarrow \boxed{\text{E}}$

$1210 - 391 = \square \rightarrow \boxed{\text{Y}}$

Scratch space:

CLUE 3

Multiplication facts (1-12)

We see rows of bright balloons. There are three baskets in each row. Let us multiply to find the total.

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

T									T								
144	44	8	36	45	96	33	49	144	33	49	56	121	49	70	8	56	

								T			
24	49	96	33	10	24	8	45	144	44	8	64

$12 \times 12 = \square \rightarrow \boxed{\text{T}}$

$7 \times 10 = \square \rightarrow \boxed{\text{K}}$

$2 \times 4 = \square \rightarrow \boxed{\text{E}}$

$12 \times 8 = \square \rightarrow \boxed{\text{N}}$

$8 \times 8 = \square \rightarrow \boxed{\text{R}}$

$3 \times 12 = \square \rightarrow \boxed{\text{B}}$

$3 \times 8 = \square \rightarrow \boxed{\text{W}}$

$3 \times 11 = \square \rightarrow \boxed{\text{D}}$

$7 \times 7 = \square \rightarrow \boxed{\text{I}}$

$1 \times 10 = \square \rightarrow \boxed{\text{Y}}$

$5 \times 9 = \square \rightarrow \boxed{\text{A}}$

$11 \times 11 = \square \rightarrow \boxed{\text{L}}$

$11 \times 4 = \square \rightarrow \boxed{\text{H}}$

$8 \times 7 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 4
Rounding

The tram meter shows the altitude. We round the number to the nearest ten to read the screen.

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

T																		T
5000	8000	3000	800	30	7000	7000	60	30	4000	8000	60	300	6000	3000	300	3000	200	5000

500	7000	60	2000	90	8000	60	30	200

Round 5,463 to the nearest thousand → **T**

Round 56 to the nearest ten → **A**

Round 33 to the nearest ten → **I**

Round 497 to the nearest hundred → **B**

Round 221 to the nearest hundred → **R**

Round 811 to the nearest hundred → **V**

Round 1,514 to the nearest thousand → **C**

Round 266 to the nearest hundred → **S**

Round 6,451 to the nearest thousand → **D**

Round 2,610 to the nearest thousand → **E**

Round 7,733 to the nearest thousand → **H**

Round 4,223 to the nearest thousand → **N**

Round 6,727 to the nearest thousand → **L**

Round 87 to the nearest ten → **K**

Scratch space:

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

We share the sweet sopapillas among our team. We divide them equally to get 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:

$10 \div 10 = \square$

$16 \div 8 = \square$

$56 \div 8 = \square$

$45 \div 9 = \square$

$40 \div 4 = \square$

$63 \div 7 = \square$

$88 \div 11 = \square$

$18 \div 6 = \square$

$55 \div 5 = \square$

$48 \div 8 = \square$

$16 \div 4 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain rides the Sandia tram car, then checks their dusty desert map.
2. The villain dashes away on a roadrunner, then checks their dusty desert map.
3. The villain floats up in a huge balloon, then puts on huge dark sunglasses.
4. The villain shines bright with neon gear, then points a tiny pocket compass.
5. The villain rides the Sandia tram car, then flashes their silver belt buckle.
6. The villain dashes away on a roadrunner, then puts on huge dark sunglasses.
7. The villain floats up in a huge balloon, then points a tiny pocket compass.
8. The villain digs up shiny turquoise stones, then checks their dusty desert map.
9. The villain digs up shiny turquoise stones, then points a tiny pocket compass.
10. The villain shines bright with neon gear, then checks their dusty desert map.
11. The villain shines bright with neon gear, then puts on huge dark sunglasses.
12. The villain dashes away on a roadrunner, then points a tiny pocket compass.

Answer Key

The Great Balloon Mystery

Culprit: Rosie

riding a fast roadrunner · using a pocket compass · wears a yellow watch · desert black hair · windy weather

Trail: Start 21 → Clue 1 18 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE BANDIT DOES NOT HOLD A PRICKLY PEAR"

What is the value of the 5 in 6,587? = 500 (T) · What is the value of the 8 in 58,624? = 8000 (S) · What is the value of the 7 in 742? = 700 (I) · What is the value of the 6 in 6,302? = 6000 (R) · What is the value of the 6 in 765? = 60 (H) · What is the value of the 7 in 7,085? = 7000 (B) · What is the value of the 5 in 952? = 50 (E) · What is the value of the 8 in 983? = 80 (P) · What is the value of the 9 in 5,391? = 90 (L) · What is the value of the 4 in 54,618? = 4000 (A) · What is the value of the 2 in 8,127? = 20 (N) · What is the value of the 3 in 3,067? = 3000 (Y) · What is the value of the 5 in 5,627? = 5000 (D) · What is the value of the 8 in 7,842? = 800 (C) · What is the value of the 4 in 340? = 40 (K) · What is the value of the 4 in 8,470? = 400 (O)

Clue 2 (Subtraction): "THE SUSPECT WEARS A YELLOW WATCH"

$971 - 104 = 867$ (T) · $1123 - 381 = 742$ (O) · $1098 - 335 = 763$ (L) · $861 - 97 = 764$ (H) · $305 - 53 = 252$ (C) · $986 - 100 = 886$ (W) · $424 - 305 = 119$ (P) · $648 - 220 = 428$ (U) · $1045 - 186 = 859$ (S) · $475 - 163 = 312$ (R) · $436 - 41 = 395$ (A) · $701 - 25 = 676$ (E) · $1210 - 391 = 819$ (Y)

Clue 3 (Multiplication facts (1-12)): "THE BANDIT DISLIKES WINDY WEATHER"

$12 \times 12 = 144$ (T) · $7 \times 10 = 70$ (K) · $2 \times 4 = 8$ (E) · $12 \times 8 = 96$ (N) · $8 \times 8 = 64$ (R) · $3 \times 12 = 36$ (B) · $3 \times 8 = 24$ (W) · $3 \times 11 = 33$ (D) · $7 \times 7 = 49$ (I) · $1 \times 10 = 10$ (Y) · $5 \times 9 = 45$ (A) · $11 \times 11 = 121$ (L) · $11 \times 4 = 44$ (H) · $8 \times 7 = 56$ (S)

Clue 4 (Rounding): "THE VILLAIN HAS DESERT BLACK HAIR"

Round 5,463 to the nearest thousand = 5000 (T) · Round 56 to the nearest ten = 60 (A) · Round 33 to the nearest ten = 30 (I) · Round 497 to the nearest hundred = 500 (B) · Round 221 to the nearest hundred = 200 (R) · Round 811 to the nearest hundred = 800 (V) · Round 1,514 to the nearest thousand = 2000 (C) · Round 266 to the nearest hundred = 300 (S) · Round 6,451 to the nearest thousand = 6000 (D) · Round 2,610 to the nearest thousand = 3000 (E) · Round 7,733 to the nearest thousand = 8000 (H) · Round 4,223 to the nearest thousand = 4000 (N) · Round 6,727 to the nearest thousand = 7000 (L) · Round 87 to the nearest ten = 90 (K)

Clue 5 (Division facts (1-12)): surviving statement is box 12 → Rosie

$10 \div 10 = 1$ · $16 \div 8 = 2$ · $56 \div 8 = 7$ · $45 \div 9 = 5$ · $40 \div 4 = 10$ · $63 \div 7 = 9$ · $88 \div 11 = 8$ · $18 \div 6 = 3$ · $55 \div 5 = 11$ · $48 \div 8 = 6$ · $16 \div 4 = 4$