



The Mystery of the Starlight Bandit

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

Detective: _____ Date: _____

The Starlight Cinema is in trouble! Someone is sneaking into the theaters, mixing up the movie reels, and eating all the snacks. The Theater Manager needs your help to find the Popcorn Bandit before the big evening show starts!

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 Popcorn Bandit is _____

Possible suspects

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

NAME	FAVORITE MOVIE GENRE	STOLEN SNACK	SUSPECT ROLE	HEADWEAR	WEAKNESS
Lucy Lobby	Comedy	Gummy Bears	Actress	Red Cap	Loud Sneeze
Ella Editor	Action	Sour Candy	Actress	Golden Crown	Sticky Floor
Penny Popcorn	Cartoon	Soda Pop	Actress	Golden Crown	Bright Flashlight
Ruby Reel	Sci-Fi	Buttered Popcorn	Actress	Golden Crown	Sticky Floor
Finn Film	Comedy	Buttered Popcorn	Actor	Red Cap	Loud Sneeze
Benny Butter	Sci-Fi	Buttered Popcorn	Actress	Red Cap	Bright Flashlight
Bella Boxoffice	Comedy	Sour Candy	Actor	Golden Crown	Bright Flashlight
Leo Lights	Sci-Fi	Buttered Popcorn	Actress	Red Cap	Sticky Floor
Zoe Zoom	Cartoon	Buttered Popcorn	Actress	Golden Crown	Loud Sneeze
Molly Music	Sci-Fi	Nacho Cheese	Actress	Golden Crown	Sticky Floor
Mia Movie	Comedy	Sour Candy	Actress	Golden Crown	Bright Flashlight
Toby Ticket	Cartoon	Gummy Bears	Actress	Golden Crown	Bright Flashlight
Clara Candy	Mystery	Gummy Bears	Actor	Red Cap	Loud Sneeze
Danny Drama	Comedy	Nacho Cheese	Actor	Golden Crown	Bright Flashlight
Oliver Oscar	Mystery	Nacho Cheese	Actress	Red Cap	Loud Sneeze
Peter Poster	Mystery	Soda Pop	Actress	Golden Crown	Bright Flashlight
Sammy Screen	Comedy	Gummy Bears	Actress	Velvet Beret	Sticky Floor
Noah Nacho	Mystery	Sour Candy	Actress	Red Cap	Bright Flashlight
Grace Glamour	Cartoon	Nacho Cheese	Actress	Golden Crown	Bright Flashlight
Charlie Camera	Comedy	Soda Pop	Actor	Velvet Beret	Loud Sneeze
Max Matinee	Action	Soda Pop	Actor	Golden Crown	Bright Flashlight

CLUE 1 Rounding

We check the popcorn machine digital counter. It only shows rounded numbers, but it helps us rule out one snack!

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2000	3000	4000	9000	20	800	400	80	2000	400	500	4000	70	800	500	2000	4000	20	2000	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
600	6000	50	50	300	9000	4000	20	200	70										

Round 2,492 to the nearest thousand	<input type="checkbox"/>	T	Round 644 to the nearest hundred	<input type="checkbox"/>	G	Round 8,667 to the nearest thousand	<input type="checkbox"/>	B
Round 21 to the nearest ten	<input type="checkbox"/>	A	Round 6,430 to the nearest thousand	<input type="checkbox"/>	U	Round 4,252 to the nearest thousand	<input type="checkbox"/>	E
Round 797 to the nearest hundred	<input type="checkbox"/>	N	Round 2,873 to the nearest thousand	<input type="checkbox"/>	H	Round 52 to the nearest ten	<input type="checkbox"/>	M
Round 370 to the nearest hundred	<input type="checkbox"/>	D	Round 198 to the nearest hundred	<input type="checkbox"/>	R	Round 79 to the nearest ten	<input type="checkbox"/>	I
Round 512 to the nearest hundred	<input type="checkbox"/>	O	Round 74 to the nearest ten	<input type="checkbox"/>	S	Round 307 to the nearest hundred	<input type="checkbox"/>	Y

Scratch space:

CLUE 2 Addition

We count the spilled movie tickets on the lobby floor. Adding them all up tells us if the villain is an actor or actress.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	
811	435	986	861	866	811	235	986	925	925	423	986	898	811	861

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
676	423	649	811	811	986	235	297	435	861	649	235	644	649	877

426 + 385 =	<input type="text"/>	<input type="text" value="T"/>	388 + 473 =	<input type="text"/>	<input type="text" value="A"/>	220 + 215 =	<input type="text"/>	<input type="text" value="H"/>
286 + 137 =	<input type="text"/>	<input type="text" value="L"/>	275 + 602 =	<input type="text"/>	<input type="text" value="N"/>	542 + 444 =	<input type="text"/>	<input type="text" value="E"/>
491 + 375 =	<input type="text"/>	<input type="text" value="C"/>	381 + 268 =	<input type="text"/>	<input type="text" value="I"/>	371 + 305 =	<input type="text"/>	<input type="text" value="G"/>
479 + 446 =	<input type="text"/>	<input type="text" value="S"/>	223 + 421 =	<input type="text"/>	<input type="text" value="P"/>	400 + 498 =	<input type="text"/>	<input type="text" value="F"/>
131 + 104 =	<input type="text"/>	<input type="text" value="R"/>	156 + 141 =	<input type="text"/>	<input type="text" value="Y"/>			

Scratch space:

CLUE 3

Subtraction

Some soda cups are missing from the snack bar. Subtracting the left-over cups from the starting box reveals a clue about their weakness.

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

<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
579	846	149	309	308	195	702	610	874	579	796	195	874	309	308	195	702

<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	
796	220	579	149	336	796	702	195	336	786	579	821	579	843

742 - 163 =	<input type="text"/>	<input type="text" value="A"/>	728 - 392 =	<input type="text"/>	<input type="text" value="E"/>	831 - 45 =	<input type="text"/>	<input type="text" value="M"/>
1131 - 335 =	<input type="text"/>	<input type="text" value="S"/>	269 - 49 =	<input type="text"/>	<input type="text" value="C"/>	401 - 92 =	<input type="text"/>	<input type="text" value="I"/>
926 - 224 =	<input type="text"/>	<input type="text" value="T"/>	473 - 165 =	<input type="text"/>	<input type="text" value="G"/>	296 - 101 =	<input type="text"/>	<input type="text" value="H"/>
693 - 83 =	<input type="text"/>	<input type="text" value="F"/>	416 - 267 =	<input type="text"/>	<input type="text" value="R"/>	1238 - 392 =	<input type="text"/>	<input type="text" value="B"/>
1124 - 250 =	<input type="text"/>	<input type="text" value="L"/>	888 - 45 =	<input type="text"/>	<input type="text" value="Y"/>	880 - 59 =	<input type="text"/>	<input type="text" value="W"/>

Scratch space:

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

We share a bag of giant pretzels evenly among the detectives. Dividing the pretzels gives us the final clue we need.

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:

$30 \div 10 = \boxed{}$

$7 \div 1 = \boxed{}$

$40 \div 8 = \boxed{}$

$36 \div 4 = \boxed{}$

$36 \div 9 = \boxed{}$

$22 \div 2 = \boxed{}$

$4 \div 2 = \boxed{}$

$72 \div 12 = \boxed{}$

$3 \div 3 = \boxed{}$

$30 \div 3 = \boxed{}$

$108 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain tangles the cartoon reel, then steals the bag of gummy bears.
2. The villain swaps the sci-fi movie reel, then gobbles up the buttered popcorn.
3. The villain tangles the cartoon reel, then spills the hot nacho cheese.
4. The villain swaps the sci-fi movie reel, then drinks the fizzy soda pop.
5. The villain messes up the comedy film, then munchies on the sour candy.
6. The villain swaps the sci-fi movie reel, then munchies on the sour candy.
7. The villain hides the mystery movie, then drinks the fizzy soda pop.
8. The villain tangles the cartoon reel, then drinks the fizzy soda pop.
9. The villain scrambles the action movie, then steals the bag of gummy bears.
10. The villain hides the mystery movie, then steals the bag of gummy bears.
11. The villain hides the mystery movie, then munchies on the sour candy.
12. The villain messes up the comedy film, then drinks the fizzy soda pop.

Answer Key

The Mystery of the Starlight Bandit

Culprit: Penny Popcorn

Cartoon · Soda Pop · Actress · Golden Crown · Bright Flashlight

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE BANDIT DOES NOT EAT GUMMY BEARS"

Round 2,492 to the nearest thousand = 2000 (T) · Round 644 to the nearest hundred = 600 (G) · Round 8,667 to the nearest thousand = 9000 (B) · Round 21 to the nearest ten = 20 (A) · Round 6,430 to the nearest thousand = 6000 (U) · Round 4,252 to the nearest thousand = 4000 (E) · Round 797 to the nearest hundred = 800 (N) · Round 2,873 to the nearest thousand = 3000 (H) · Round 52 to the nearest ten = 50 (M) · Round 370 to the nearest hundred = 400 (D) · Round 198 to the nearest hundred = 200 (R) · Round 79 to the nearest ten = 80 (I) · Round 512 to the nearest hundred = 500 (O) · Round 74 to the nearest ten = 70 (S) · Round 307 to the nearest hundred = 300 (Y)

Clue 2 (Addition): "THE ACTRESS LEFT A GLITTERY HAIRPIN"

$426 + 385 = 811$ (T) · $388 + 473 = 861$ (A) · $220 + 215 = 435$ (H) · $286 + 137 = 423$ (L) · $275 + 602 = 877$ (N) · $542 + 444 = 986$ (E) · $491 + 375 = 866$ (C) · $381 + 268 = 649$ (I) · $371 + 305 = 676$ (G) · $479 + 446 = 925$ (S) · $223 + 421 = 644$ (P) · $400 + 498 = 898$ (F) · $131 + 104 = 235$ (R) · $156 + 141 = 297$ (Y)

Clue 3 (Subtraction): "A BRIGHT FLASHLIGHT SCARES THEM AWAY"

$742 - 163 = 579$ (A) · $728 - 392 = 336$ (E) · $831 - 45 = 786$ (M) · $1131 - 335 = 796$ (S) · $269 - 49 = 220$ (C) · $401 - 92 = 309$ (I) · $926 - 224 = 702$ (T) · $473 - 165 = 308$ (G) · $296 - 101 = 195$ (H) · $693 - 83 = 610$ (F) · $416 - 267 = 149$ (R) · $1238 - 392 = 846$ (B) · $1124 - 250 = 874$ (L) · $888 - 45 = 843$ (Y) · $880 - 59 = 821$ (W)

Clue 4 (Multiplication facts (1-12)): "THE GOLDEN CROWN SHINES IN DARK"

$11 \times 6 = 66$ (T) · $7 \times 8 = 56$ (R) · $6 \times 6 = 36$ (O) · $3 \times 11 = 33$ (L) · $6 \times 7 = 42$ (K) · $11 \times 2 = 22$ (I) · $10 \times 9 = 90$ (A) · $10 \times 11 = 110$ (E) · $8 \times 11 = 88$ (D) · $12 \times 12 = 144$ (G) · $8 \times 2 = 16$ (H) · $2 \times 1 = 2$ (W) · $3 \times 1 = 3$ (C) · $7 \times 3 = 21$ (N) · $2 \times 2 = 4$ (S)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Penny Popcorn

$30 \div 10 = 3$ · $7 \div 1 = 7$ · $40 \div 8 = 5$ · $36 \div 4 = 9$ · $36 \div 9 = 4$ · $22 \div 2 = 11$ · $4 \div 2 = 2$ · $72 \div 12 = 6$ · $3 \div 3 = 1$ · $30 \div 3 = 10$ · $108 \div 9 = 12$