



The Mystery of the Missing Cupcake

Grade 1 math · Addition, Subtraction, Word problems, Skip counting, Missing addends · Reading level grades 1-2

Detective: _____ Date: _____

Oh no! Zainab had a special giant strawberry cupcake for our Friday Eid party, but now it is gone! We must help our friends find the cupcake thief before lunch recess begins!

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 cupcake thief is _____

Possible suspects

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

NAME	FAVORITE CLASS	BACKPACK COLOR	WRITING HAND	HEADWEAR STYLE	FAVORITE SNACK
Huda	Art Class	Red Backpack	Right Handed	Flower Clip	Sweet Dates
Mustafa	Art Class	Blue Backpack	Right Handed	Flower Clip	Sweet Dates
Ali	Arabic Class	Green Backpack	Left Handed	Knit Cap	Sweet Dates
Safia	Art Class	Yellow Backpack	Left Handed	Flower Clip	Salty Pretzel
Amina	Arabic Class	Blue Backpack	Left Handed	Blue Hijab	Salty Pretzel
Maryam	Art Class	Yellow Backpack	Left Handed	Flower Clip	Sweet Dates
Yahya	Science Lab	Red Backpack	Right Handed	Flower Clip	Salty Pretzel
Rayan	Islamic Studies	Purple Backpack	Left Handed	Knit Cap	Salty Pretzel
Ibrahim	Science Lab	Blue Backpack	Right Handed	Knit Cap	Sweet Dates
Omar	Islamic Studies	Yellow Backpack	Right Handed	Blue Hijab	Salty Pretzel
Aisha	Islamic Studies	Red Backpack	Left Handed	Flower Clip	Sweet Dates
Anas	Arabic Class	Red Backpack	Left Handed	Flower Clip	Sweet Dates
Hamza	Gym Class	Purple Backpack	Left Handed	Flower Clip	Sweet Dates
Sana	Science Lab	Blue Backpack	Left Handed	Blue Hijab	Sweet Dates
Hana	Gym Class	Red Backpack	Right Handed	Blue Hijab	Sweet Dates
Fatima	Art Class	Yellow Backpack	Right Handed	Knit Cap	Sweet Dates
Sara	Art Class	Red Backpack	Left Handed	Flower Clip	Sweet Dates
Bilal	Gym Class	Green Backpack	Right Handed	Flower Clip	Juice Box
Zainab	Gym Class	Purple Backpack	Left Handed	Blue Hijab	Juice Box
Yusuf	Gym Class	Green Backpack	Left Handed	Knit Cap	Juice Box
Khadija	Arabic Class	Yellow Backpack	Left Handed	Knit Cap	Salty Pretzel

CLUE 1 Addition

Zainab wants to count the party plates. She adds the red plates to the blue plates to find the total. Help her add them to get the first clue!

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

T			T											T				
13	16	14	13	16	19	14	7	11	2	14	20	18	2	13	16	4	17	14
4	3	5	15	3	10	14	8	4	12	6	3	4	12	6				

$5 + 8 = \square \rightarrow$ T	$6 + 13 = \square \rightarrow$ I	$6 + 12 = \square \rightarrow$ N	
$7 + 9 = \square \rightarrow$ H	$1 + 1 = \square \rightarrow$ O	$6 + 5 = \square \rightarrow$ D	$8 + 6 = \square \rightarrow$ E
$1 + 4 = \square \rightarrow$ U	$12 + 8 = \square \rightarrow$ S	$6 + 11 = \square \rightarrow$ V	
$2 + 1 = \square \rightarrow$ P	$5 + 2 = \square \rightarrow$ F	$5 + 7 = \square \rightarrow$ C	$4 + 4 = \square \rightarrow$ B
$6 + 9 = \square \rightarrow$ R	$3 + 7 = \square \rightarrow$ L	$2 + 2 = \square \rightarrow$ A	$2 + 4 = \square \rightarrow$ K

Scratch space:

CLUE 2 Subtraction

Yusuf had a big bag of balloons. Some balloons popped and flew away. Subtract the popped ones to see how many are left and find the next clue!

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

T 9	5	10	T 9	5	17	10	19	5	10	3	18	T 9	5	10	
16	13	14	14	12	17	12	T 9	5	10	17	4	3	10	19	T 9
5	1	12	18												

$14 - 5 = \square \rightarrow \boxed{\text{T}}$	$17 - 1 = \square \rightarrow \boxed{\text{S}}$	$8 - 7 = \square \rightarrow \boxed{\text{A}}$	$17 - 3 = \square \rightarrow \boxed{\text{O}}$
$13 - 8 = \square \rightarrow \boxed{\text{H}}$	$16 - 3 = \square \rightarrow \boxed{\text{P}}$	$19 - 2 = \square \rightarrow \boxed{\text{I}}$	
$19 - 1 = \square \rightarrow \boxed{\text{D}}$	$20 - 1 = \square \rightarrow \boxed{\text{F}}$	$17 - 7 = \square \rightarrow \boxed{\text{E}}$	
$19 - 7 = \square \rightarrow \boxed{\text{N}}$	$10 - 7 = \square \rightarrow \boxed{\text{L}}$	$11 - 7 = \square \rightarrow \boxed{\text{R}}$	

Scratch space:

CLUE 3

Word problems

Our teacher shares a story about sharing dates during lunch. Solve this simple story puzzle to unlock another clue!

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

Someone scared the villain off with S S .

28 19 23 23 37 34 31 37 23 28

Amina lined up 7 rows of 4 juice box. How many juice box in all?

Answer: → S

There were 32 hijab pin. 9 were used up. How many hijab pin are left?

Answer: → E

There were 26 cupcake. 7 were used up. How many cupcake are left?

Answer: → W

Amina found 3 cupcake yesterday and 31 more today. How many cupcake in all?

Answer: → D

Amina found 16 colored pencil yesterday and 15 more today. How many colored pencil in all?

Answer: → A

Amina found 11 hijab pin yesterday and 26 more today. How many hijab pin in all?

Answer: → T

Scratch space:

CLUE 4 Skip counting

Fatima counts the school juice boxes by twos. Count along with her in steps to reveal a very important clue!

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

T			T													
65	6	33	65	6	28	33	16	60	36	50	39	39	33	60	21	
39	28	18	80	16	100	50	90	33	36	35	100	28	39			

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **T**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **R**

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 → **O**

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

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **H**

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **C**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **D**

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

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

Scratch space:

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

The kids need ten party hats but only have seven. How many more hats do they need? Solve this missing number puzzle for 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:

$3 + \underline{\quad} = 4$

$1 + \underline{\quad} = 8$

$8 + \underline{\quad} = 16$

$10 + \underline{\quad} = 15$

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

$5 + \underline{\quad} = 11$

$6 + \underline{\quad} = 9$

$8 + \underline{\quad} = 12$

$4 + \underline{\quad} = 13$

$4 + \underline{\quad} = 15$

$10 + \underline{\quad} = 12$

Step 2 - cross out the sentence with each answer:

1. The villain runs past the art room, then puts the sweet treat in a box.
2. The villain quietly opens the fridge door, then puts the sweet treat in a box.
3. The villain runs past the art room, then hurries back to the classroom.
4. The villain quietly opens the fridge door, then takes the frosting off the top.
5. The villain tiptoes down the hallway, then zips the cupcake into a bag.
6. The villain tiptoes down the hallway, then grabs the strawberry cupcake.
7. The villain sneaks into the classroom kitchen, then puts the sweet treat in a box.
8. The villain runs past the art room, then zips the cupcake into a bag.
9. The villain runs past the art room, then grabs the strawberry cupcake.
10. The villain hides behind the lunch counter, then puts the sweet treat in a box.
11. The villain sneaks into the classroom kitchen, then takes the frosting off the top.
12. The villain hides behind the lunch counter, then hurries back to the classroom.

Answer Key

The Mystery of the Missing Cupcake

Culprit: Anas

Arabic Class · Red Backpack · Left Handed · Flower Clip · Sweet Dates

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT HAVE A PURPLE BACKPACK"

$5 + 8 = 13$ (T) · $6 + 13 = 19$ (I) · $6 + 12 = 18$ (N) · $7 + 9 = 16$ (H) · $1 + 1 = 2$ (O) · $6 + 5 = 11$ (D) · $8 + 6 = 14$ (E) · $1 + 4 = 5$ (U) · $12 + 8 = 20$ (S) · $6 + 11 = 17$ (V) · $2 + 1 = 3$ (P) · $5 + 2 = 7$ (F) · $5 + 7 = 12$ (C) · $4 + 4 = 8$ (B) · $6 + 9 = 15$ (R) · $3 + 7 = 10$ (L) · $2 + 2 = 4$ (A) · $2 + 4 = 6$ (K)

Clue 2 (Subtraction): "THE THIEF HELD THE SPOON IN THEIR LEFT HAND"

$14 - 5 = 9$ (T) · $17 - 1 = 16$ (S) · $8 - 7 = 1$ (A) · $17 - 3 = 14$ (O) · $13 - 8 = 5$ (H) · $16 - 3 = 13$ (P) · $19 - 2 = 17$ (I) · $19 - 1 = 18$ (D) · $20 - 1 = 19$ (F) · $17 - 7 = 10$ (E) · $19 - 7 = 12$ (N) · $10 - 7 = 3$ (L) · $11 - 7 = 4$ (R)

Clue 3 (Word problems): "SWEET DATES"

Amina lined up 7 rows of 4 juice box. How many juice box in all? = 28 (S) · There were 32 hijab pin. 9 were used up. How many hijab pin are left? = 23 (E) · There were 26 cupcake. 7 were used up. How many cupcake are left? = 19 (W) · Amina found 3 cupcake yesterday and 31 more today. How many cupcake in all? = 34 (D) · Amina found 16 colored pencil yesterday and 15 more today. How many colored pencil in all? = 31 (A) · Amina found 11 hijab pin yesterday and 26 more today. How many hijab pin in all? = 37 (T)

Clue 4 (Skip counting): "THE THIEF DROPPED A PINK FLOWER CLIP"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (L) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (K) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 = 18 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (P)

Clue 5 (Missing addends): surviving statement is box 10 → Anas

$3 + \underline{\quad} = 4 = 1$ · $1 + \underline{\quad} = 8 = 7$ · $8 + \underline{\quad} = 16 = 8$ · $10 + \underline{\quad} = 15 = 5$ · $4 + \underline{\quad} = 16 = 12$ · $5 + \underline{\quad} = 11 = 6$ · $6 + \underline{\quad} = 9 = 3$ · $8 + \underline{\quad} = 12 = 4$ · $4 + \underline{\quad} = 13 = 9$ · $4 + \underline{\quad} = 15 = 11$ · $10 + \underline{\quad} = 12 = 2$