



The Mystery of the Missing Beacon

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

Detective: _____ **Date:** _____

Someone snuck into the village blacksmith shop and mined the precious diamond beacon! The village iron golem is too slow to catch them. We need a clever crafter to look at the blocky evidence and find the thief before they craft something unstoppable.

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 Grief-Bot is _____

Possible suspects

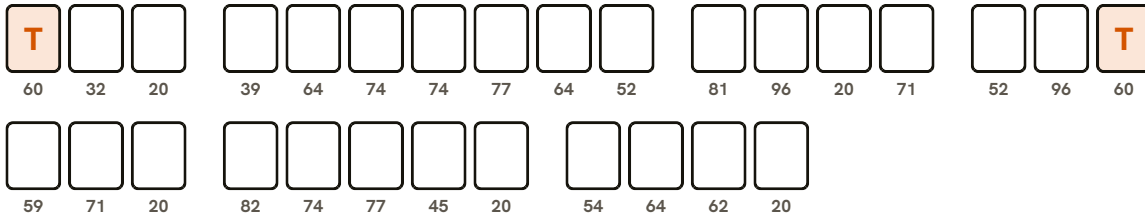
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MASTER BLOCK	SPAWN EGG	COMBAT STANCE	ARMOR HELMET	BEDROCK WEAKNESS
DanTDM	Slime block	Creeper spark	Right handed shield	Iron helmet	Ocelot cat sound
Dream	Glowstone dust	Blaze fire	Left handed shield	Iron helmet	Splash water bottle
MumboJumbo	Slime block	Zombie growl	Left handed shield	Netherite helmet	Splash water bottle
Hermit	TNT block	Zombie growl	Left handed shield	Iron helmet	Splash water bottle
Stampy	Redstone wire	Enderman teleport	Right handed shield	Iron helmet	Splash water bottle
Aphmau	Glowstone dust	Creeper spark	Left handed shield	Diamond helmet	Ocelot cat sound
Alex	Redstone wire	Blaze fire	Right handed shield	Diamond helmet	Splash water bottle
Grian	Obsidian block	Enderman teleport	Left handed shield	Diamond helmet	Splash water bottle
EthosLab	Redstone wire	Skeleton arrow	Left handed shield	Netherite helmet	Splash water bottle
LDShadowLady	Obsidian block	Skeleton arrow	Left handed shield	Netherite helmet	Cold milk bucket
GoodTimesWithScar	TNT block	Blaze fire	Left handed shield	Diamond helmet	Cold milk bucket
Docm77	Slime block	Skeleton arrow	Left handed shield	Iron helmet	Splash water bottle
Skeppy	Redstone wire	Zombie growl	Left handed shield	Netherite helmet	Ocelot cat sound
Keralis	Obsidian block	Zombie growl	Left handed shield	Iron helmet	Splash water bottle
BadBoyHalo	TNT block	Creeper spark	Left handed shield	Iron helmet	Cold milk bucket
Sapnap	Slime block	Enderman teleport	Left handed shield	Diamond helmet	Ocelot cat sound
ZombieCleo	Slime block	Enderman teleport	Left handed shield	Iron helmet	Splash water bottle
VintageBeef	Obsidian block	Blaze fire	Right handed shield	Netherite helmet	Ocelot cat sound
Steve	Glowstone dust	Enderman teleport	Right handed shield	Iron helmet	Cold milk bucket
CaptainSparklez	TNT block	Creeper spark	Right handed shield	Iron helmet	Ocelot cat sound
GeorgeNotFound	TNT block	Blaze fire	Right handed shield	Diamond helmet	Cold milk bucket

CLUE 1 Place value

The thief left a coordinate code on a wooden signpost. Let's look at the tens and ones blocks to read the secret number!

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



What number has 6 tens and 0 ones? → **T**

What number has 4 tens and 5 ones? → **Z**

What number has 7 tens and 1 one? → **S**

What number has 7 tens and 7 ones? → **A**

What number has 6 tens and 4 ones? → **I**

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

What number has 7 tens and 4 ones? → **L**

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

What number has 5 tens and 4 ones? → **F**

What number has 8 tens and 1 one? → **D**

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

What number has 6 tens and 2 ones? → **R**

What number has 8 tens and 2 ones? → **B**

What number has 3 tens and 9 ones? → **V**

What number has 2 tens and 0 ones? → **E**

What number has 9 tens and 6 ones? → **O**

Scratch space:

CLUE 2 Addition

We found a pile of dropped iron ingots and gold ingots. Let's count them all together to find the next lead!

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

W																	
80	47	30	26	67	29	55	40	69	71	47	87	55	73	70	21	66	40

26	29	96	69	47	87	47	30	96	80	70	87	87

$37 + 43 = \square \rightarrow$ W	$16 + 39 = \square \rightarrow$ D	$24 + 23 = \square \rightarrow$ E
$40 + 47 = \square \rightarrow$ L	$12 + 28 = \square \rightarrow$ S	$18 + 12 = \square \rightarrow$ F
$46 + 25 = \square \rightarrow$ I	$22 + 44 = \square \rightarrow$ K	$37 + 33 = \square \rightarrow$ A
$11 + 18 = \square \rightarrow$ N	$15 + 11 = \square \rightarrow$ O	$56 + 40 = \square \rightarrow$ T
$20 + 49 = \square \rightarrow$ H	$12 + 9 = \square \rightarrow$ R	$29 + 38 = \square \rightarrow$ U
$52 + 21 = \square \rightarrow$ M		

Scratch space:

CLUE 3 Subtraction

The villain broke some glass blocks from our greenhouse window. Subtract the broken blocks to see how many are left!

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

T																
24	54	70	67	74	29	29	85	74	88	59	85	88	85	73	85	76

						T					T	T			
45	59	63	51	73	85	24	70	59	28	63	24	24	29	70	46

$37 - 13 = \square \rightarrow$ T	$127 - 39 = \square \rightarrow$ N	$95 - 28 = \square \rightarrow$ V
$51 - 22 = \square \rightarrow$ L	$74 - 20 = \square \rightarrow$ H	$89 - 30 = \square \rightarrow$ R
$94 - 9 = \square \rightarrow$ A	$110 - 36 = \square \rightarrow$ I	$77 - 14 = \square \rightarrow$ O
$70 - 19 = \square \rightarrow$ M	$109 - 36 = \square \rightarrow$ W	$70 - 25 = \square \rightarrow$ F
$59 - 31 = \square \rightarrow$ B	$100 - 24 = \square \rightarrow$ Y	$71 - 25 = \square \rightarrow$ S
$99 - 29 = \square \rightarrow$ E		

Scratch space:

CLUE 4 Skip counting

The footprints jump across a path of lily pads spaced out by twos. Count by twos to follow the thief's exact trail!

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

W																	
42	18	60	40	80	15	39	6	90	18	50	55	90	40	15			
60	24	12	120	18	26	12	10	10	27	18	30	55	24	24	12	6	18

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 → **I**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 → **O**

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 → **V**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **A**

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

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

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

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **K**

Scratch space:

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

Our chest should hold a full stack of emeralds, but some are missing. Solve how many are gone to crack the final lock!

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:

$5 + \underline{\quad} = 7$

$5 + \underline{\quad} = 16$

$9 + \underline{\quad} = 21$

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

$9 + \underline{\quad} = 12$

$2 + \underline{\quad} = 3$

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

$10 + \underline{\quad} = 17$

$9 + \underline{\quad} = 19$

$2 + \underline{\quad} = 10$

$2 + \underline{\quad} = 11$

Step 2 - cross out the sentence with each answer:

1. The villain builds an obsidian cage around the loot, then shoots a skeleton arrow to block the path.
2. The villain bounces over the wall on a slime block, then shoots a skeleton arrow to block the path.
3. The villain steals the shiny glowstone lantern, then scares the villagers with a zombie growl.
4. The villain builds an obsidian cage around the loot, then scares the villagers with a zombie growl.
5. The villain blows open the vault door with TNT, then vanishes using an enderman teleport.
6. The villain steals the shiny glowstone lantern, then shoots a skeleton arrow to block the path.
7. The villain builds an obsidian cage around the loot, then vanishes using an enderman teleport.
8. The villain steals the shiny glowstone lantern, then vanishes using an enderman teleport.
9. The villain blows open the vault door with TNT, then escapes with a green creeper spark.
10. The villain bounces over the wall on a slime block, then heats up the escape route with a blaze fire.
11. The villain blows open the vault door with TNT, then scares the villagers with a zombie growl.
12. The villain bounces over the wall on a slime block, then vanishes using an enderman teleport.

Answer Key

The Mystery of the Missing Beacon

Culprit: Keralis

Obsidian block · Zombie growl · Left handed shield · Iron helmet · Splash water bottle

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE BLAZE FIRE"

What number has 6 tens and 0 ones? = 60 (T) · What number has 4 tens and 5 ones? = 45 (Z) · What number has 7 tens and 1 one? = 71 (S) · What number has 7 tens and 7 ones? = 77 (A) · What number has 6 tens and 4 ones? = 64 (I) · What number has 5 tens and 9 ones? = 59 (U) · What number has 7 tens and 4 ones? = 74 (L) · What number has 5 tens and 2 ones? = 52 (N) · What number has 5 tens and 4 ones? = 54 (F) · What number has 8 tens and 1 one? = 81 (D) · What number has 3 tens and 2 ones? = 32 (H) · What number has 6 tens and 2 ones? = 62 (R) · What number has 8 tens and 2 ones? = 82 (B) · What number has 3 tens and 9 ones? = 39 (V) · What number has 2 tens and 0 ones? = 20 (E) · What number has 9 tens and 6 ones? = 96 (O)

Clue 2 (Addition): "WE FOUND SHIELD MARKS ON THE LEFT WALL"

$37 + 43 = 80$ (W) · $16 + 39 = 55$ (D) · $24 + 23 = 47$ (E) · $40 + 47 = 87$ (L) · $12 + 28 = 40$ (S) · $18 + 12 = 30$ (F) · $46 + 25 = 71$ (I) · $22 + 44 = 66$ (K) · $37 + 33 = 70$ (A) · $11 + 18 = 29$ (N) · $15 + 11 = 26$ (O) · $56 + 40 = 96$ (T) · $20 + 49 = 69$ (H) · $12 + 9 = 21$ (R) · $29 + 38 = 67$ (U) · $52 + 21 = 73$ (M)

Clue 3 (Subtraction): "THE VILLAIN RAN AWAY FROM WATER BOTTLES"

$37 - 13 = 24$ (T) · $127 - 39 = 88$ (N) · $95 - 28 = 67$ (V) · $51 - 22 = 29$ (L) · $74 - 20 = 54$ (H) · $89 - 30 = 59$ (R) · $94 - 9 = 85$ (A) · $110 - 36 = 74$ (I) · $77 - 14 = 63$ (O) · $70 - 19 = 51$ (M) · $109 - 36 = 73$ (W) · $70 - 25 = 45$ (F) · $59 - 31 = 28$ (B) · $100 - 24 = 76$ (Y) · $71 - 25 = 46$ (S) · $99 - 29 = 70$ (E)

Clue 4 (Skip counting): "WE FOUND GREY IRON FLAKES AT THE VILLAGE"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 = 40 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 = 30 (V) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (D) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (K)

Clue 5 (Missing addends): surviving statement is box 4 → Keralis

$5 + \underline{\quad} = 7 = 2$ · $5 + \underline{\quad} = 16 = 11$ · $9 + \underline{\quad} = 21 = 12$ · $5 + \underline{\quad} = 11 = 6$ · $9 + \underline{\quad} = 12 = 3$ · $2 + \underline{\quad} = 3 = 1$ · $10 + \underline{\quad} = 15 = 5$ · $10 + \underline{\quad} = 17 = 7$ · $9 + \underline{\quad} = 19 = 10$ · $2 + \underline{\quad} = 10 = 8$ · $2 + \underline{\quad} = 11 = 9$