

The Mystery of the Missing Beacon

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

Detective: _____ Date: _____

Oh no! A sneaky thief stole the glowing Beacon from the town square. Our cozy village is dark. We must look for blocks and clues to find the thief!

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 thief is _____

Possible suspects

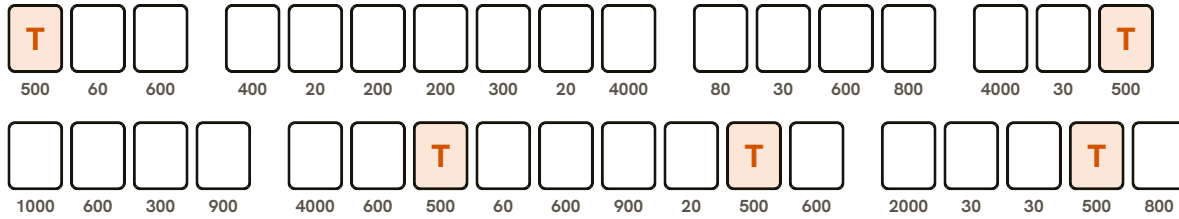
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	HANDHELD ITEM	FOOTWEAR	HANDEDNESS	HEADGEAR	FEAR
Tubbo	Golden Apple	Iron Boots	Left-Handed	Pumpkin Mask	Water Bucket
Alex	Fire Charge	Iron Boots	Right-Handed	Diamond Helmet	Iron Golem
Stampy	Golden Apple	Netherite Boots	Left-Handed	Diamond Helmet	Iron Golem
DanTDM	Diamond Sword	Gold Boots	Left-Handed	Diamond Helmet	Water Bucket
Dream	Ender Pearl	Iron Boots	Left-Handed	Turtle Helmet	Wolf Pack
Jeb	Fire Charge	Iron Boots	Left-Handed	Diamond Helmet	Iron Golem
Captain	Ender Pearl	Leather Boots	Left-Handed	Diamond Helmet	Iron Golem
Steve	Ender Pearl	Iron Boots	Right-Handed	Pumpkin Mask	Water Bucket
Etho	Diamond Sword	Gold Boots	Right-Handed	Diamond Helmet	Wolf Pack
Sparky	Diamond Sword	Chain Boots	Left-Handed	Pumpkin Mask	Iron Golem
George	Ender Pearl	Netherite Boots	Right-Handed	Diamond Helmet	Iron Golem
Grian	Fire Charge	Chain Boots	Left-Handed	Pumpkin Mask	Iron Golem
Sparkles	Golden Apple	Leather Boots	Left-Handed	Diamond Helmet	Iron Golem
Lizzie	Redstone Dust	Leather Boots	Left-Handed	Diamond Helmet	Wolf Pack
Joel	Redstone Dust	Leather Boots	Left-Handed	Pumpkin Mask	Wolf Pack
Tommy	Fire Charge	Gold Boots	Left-Handed	Turtle Helmet	Iron Golem
Dinnerbone	Ender Pearl	Chain Boots	Left-Handed	Turtle Helmet	Water Bucket
Skeppy	Golden Apple	Chain Boots	Left-Handed	Diamond Helmet	Iron Golem
Mumbo	Fire Charge	Chain Boots	Left-Handed	Turtle Helmet	Iron Golem
Hermit	Redstone Dust	Chain Boots	Left-Handed	Turtle Helmet	Iron Golem
Sapnap	Diamond Sword	Netherite Boots	Left-Handed	Diamond Helmet	Water Bucket

CLUE 1 Place value

We find a chest of building blocks. They are packed in groups of tens and hundreds. Let us use place value to find our first clue.

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



What is the value of the 5 in 537? → **T**

What is the value of the 6 in 365? → **H**

What is the value of the 8 in 5,381? → **D**

What is the value of the 1 in 1,222? → **W**

What is the value of the 2 in 32,874? → **B**

What is the value of the 8 in 3,824? → **S**

What is the value of the 6 in 2,654? → **E**

What is the value of the 2 in 4,270? → **L**

What is the value of the 3 in 831? → **O**

What is the value of the 2 in 9,520? → **I**

What is the value of the 3 in 9,372? → **A**

What is the value of the 4 in 3,425? → **V**

What is the value of the 9 in 961? → **R**

What is the value of the 4 in 4,383? → **N**

Scratch space:

CLUE 2 Subtraction

The thief dug a deep tunnel. Some iron blocks fell out of their pack. Subtract the lost blocks to see where the path goes.

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

T																		
514	779	155	687	362	280	687	467	155	438	347	196	237	687	467	356	280	361	

235	697	433	155	438	347	319	280	196	155	798	514	319		

$862 - 348 = \square \rightarrow$ T	$1006 - 309 = \square \rightarrow$ I	$1100 - 302 = \square \rightarrow$ F
$597 - 250 = \square \rightarrow$ B	$596 - 129 = \square \rightarrow$ K	$290 - 53 = \square \rightarrow$ O
$609 - 176 = \square \rightarrow$ N	$588 - 392 = \square \rightarrow$ L	$643 - 205 = \square \rightarrow$ D
$423 - 67 = \square \rightarrow$ W	$471 - 110 = \square \rightarrow$ S	$260 - 105 = \square \rightarrow$ E
$566 - 331 = \square \rightarrow$ M	$896 - 117 = \square \rightarrow$ H	$398 - 36 = \square \rightarrow$ R
$680 - 361 = \square \rightarrow$ Y	$417 - 137 = \square \rightarrow$ A	$841 - 154 = \square \rightarrow$ C

Scratch space:

CLUE 3
Multiplication facts (1-12)

We find a farm with rows of sweet berries. Each row has the same count of plants. Multiply the rows to find the next lead.

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

T																		
54	55	120	7	70	35	35	20	70	14	30	20	32	32	27	20	2	120	84
		T																
22	96	54	55	120	70	2	22	14	77	22	35	120	49					

$9 \times 6 = \square \rightarrow \text{T}$

$1 \times 2 = \square \rightarrow \text{R}$

$7 \times 11 = \square \rightarrow \text{G}$

$7 \times 2 = \square \rightarrow \text{N}$

$7 \times 7 = \square \rightarrow \text{M}$

$3 \times 10 = \square \rightarrow \text{W}$

$7 \times 12 = \square \rightarrow \text{D}$

$8 \times 4 = \square \rightarrow \text{S}$

$1 \times 7 = \square \rightarrow \text{V}$

$10 \times 7 = \square \rightarrow \text{I}$

$10 \times 12 = \square \rightarrow \text{E}$

$7 \times 5 = \square \rightarrow \text{L}$

$8 \times 12 = \square \rightarrow \text{F}$

$2 \times 11 = \square \rightarrow \text{O}$

$9 \times 3 = \square \rightarrow \text{C}$

$5 \times 4 = \square \rightarrow \text{A}$

$5 \times 11 = \square \rightarrow \text{H}$

Scratch space:

CLUE 4 Rounding

The thief broke our compass. The red needle only points to the nearest ten. Round the number to get back on track.

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

B																
900	500	80	20	300	60	800	5000	400	8000	300	2000	700	800	3000	300	2000
										B						
9000	20	3000	20	400	8000	90	700	20	900	20	300	3000	400	70	40	

Round 926 to the nearest hundred → **B**

Round 745 to the nearest hundred → **H**

Round 20 to the nearest ten → **E**

Round 4,872 to the nearest thousand → **M**

Round 833 to the nearest hundred → **A**

Round 80 to the nearest ten → **U**

Round 93 to the nearest ten → **T**

Round 2,442 to the nearest thousand → **S**

Round 288 to the nearest hundred → **D**

Round 58 to the nearest ten → **I**

Round 397 to the nearest hundred → **O**

Round 36 to the nearest ten → **K**

Round 8,926 to the nearest thousand → **W**

Round 2,667 to the nearest thousand → **R**

Round 525 to the nearest hundred → **L**

Round 8,363 to the nearest thousand → **N**

Round 71 to the nearest ten → **C**

Scratch space:

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

We find a bag of shiny emeralds left on the dirt. We must split them into equal piles to decode the final secret.

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:

$96 \div 8 = \boxed{}$

$72 \div 8 = \boxed{}$

$18 \div 9 = \boxed{}$

$8 \div 2 = \boxed{}$

$110 \div 11 = \boxed{}$

$7 \div 1 = \boxed{}$

$40 \div 8 = \boxed{}$

$24 \div 8 = \boxed{}$

$33 \div 3 = \boxed{}$

$96 \div 12 = \boxed{}$

$6 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain eats a golden apple, then creeps away in leather boots.
2. The villain throws an ender pearl, then creeps away in leather boots.
3. The villain sprinkles redstone dust, then creeps away in leather boots.
4. The villain throws an ender pearl, then stomps away in iron boots.
5. The villain eats a golden apple, then stomps away in iron boots.
6. The villain shoots a fire charge, then creeps away in leather boots.
7. The villain sprinkles redstone dust, then marches away in netherite boots.
8. The villain eats a golden apple, then clatters away in gold boots.
9. The villain eats a golden apple, then steps away in chain boots.
10. The villain swings a diamond sword, then creeps away in leather boots.
11. The villain swings a diamond sword, then marches away in netherite boots.
12. The villain shoots a fire charge, then stomps away in iron boots.

Answer Key

The Mystery of the Missing Beacon

Culprit: Sparkles

Golden Apple · Leather Boots · Left-Handed · Diamond Helmet · Iron Golem

Trail: Start 21 → Clue 1 18 → Clue 2 15 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT WEAR NETHERITE BOOTS"

What is the value of the 5 in 537? = 500 (T) · What is the value of the 6 in 365? = 60 (H) · What is the value of the 8 in 5,381? = 80 (D) · What is the value of the 1 in 1,222? = 1000 (W) · What is the value of the 2 in 32,874? = 2000 (B) · What is the value of the 8 in 3,824? = 800 (S) · What is the value of the 6 in 2,654? = 600 (E) · What is the value of the 2 in 4,270? = 200 (L) · What is the value of the 3 in 831? = 30 (O) · What is the value of the 2 in 9,520? = 20 (I) · What is the value of the 3 in 9,372? = 300 (A) · What is the value of the 4 in 3,425? = 400 (V) · What is the value of the 9 in 961? = 900 (R) · What is the value of the 4 in 4,383? = 4000 (N)

Clue 2 (Subtraction): "THE CRACKED BLOCK WAS MINED BY A LEFTY"

862 - 348 = 514 (T) · 1006 - 309 = 697 (I) · 1100 - 302 = 798 (F) · 597 - 250 = 347 (B) · 596 - 129 = 467 (K) · 290 - 53 = 237 (O) · 609 - 176 = 433 (N) · 588 - 392 = 196 (L) · 643 - 205 = 438 (D) · 423 - 67 = 356 (W) · 471 - 110 = 361 (S) · 260 - 105 = 155 (E) · 566 - 331 = 235 (M) · 896 - 117 = 779 (H) · 398 - 36 = 362 (R) · 680 - 361 = 319 (Y) · 417 - 137 = 280 (A) · 841 - 154 = 687 (C)

Clue 3 (Multiplication facts (1-12)): "THE VILLAIN WAS SCARED OF THE IRON GOLEM"

$9 \times 6 = 54$ (T) · $1 \times 2 = 2$ (R) · $7 \times 11 = 77$ (G) · $7 \times 2 = 14$ (N) · $7 \times 7 = 49$ (M) · $3 \times 10 = 30$ (W) · $7 \times 12 = 84$ (D) · $8 \times 4 = 32$ (S) · $1 \times 7 = 7$ (V) · $10 \times 7 = 70$ (I) · $10 \times 12 = 120$ (E) · $7 \times 5 = 35$ (L) · $8 \times 12 = 96$ (F) · $2 \times 11 = 22$ (O) · $9 \times 3 = 27$ (C) · $5 \times 4 = 20$ (A) · $5 \times 11 = 55$ (H)

Clue 4 (Rounding): "BLUE DIAMOND SHARDS WERE ON THE BEDROCK"

Round 926 to the nearest hundred = 900 (B) · Round 745 to the nearest hundred = 700 (H) · Round 20 to the nearest ten = 20 (E) · Round 4,872 to the nearest thousand = 5000 (M) · Round 833 to the nearest hundred = 800 (A) · Round 80 to the nearest ten = 80 (U) · Round 93 to the nearest ten = 90 (T) · Round 2,442 to the nearest thousand = 2000 (S) · Round 288 to the nearest hundred = 300 (D) · Round 58 to the nearest ten = 60 (I) · Round 397 to the nearest hundred = 400 (O) · Round 36 to the nearest ten = 40 (K) · Round 8,926 to the nearest thousand = 9000 (W) · Round 2,667 to the nearest thousand = 3000 (R) · Round 525 to the nearest hundred = 500 (L) · Round 8,363 to the nearest thousand = 8000 (N) · Round 71 to the nearest ten = 70 (C)

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

$96 \div 8 = 12$ · $72 \div 8 = 9$ · $18 \div 9 = 2$ · $8 \div 2 = 4$ · $110 \div 11 = 10$ · $7 \div 1 = 7$ · $40 \div 8 = 5$ · $24 \div 8 = 3$ · $33 \div 3 = 11$ · $96 \div 12 = 8$ · $6 \div 1 = 6$