



The Missing Golden Apple

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

Detective: _____ Date: _____

Oh no! Someone snuck into the village temple and stole the legendary Golden Apple! The librarian is very sad. We must search the server, gather clues, and find the sneaky griever!

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 griever is _____

Possible suspects

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

NAME	TOOL OF CHOICE	INVENTORY BLOCK	ACTION HAND	HELMET MATERIAL	FEARED MOB
Aphmau	flint and steel	slime block	left handed	iron helmet	creeper
Dream	iron axe	redstone block	left handed	gold helmet	phantom
BdoubleO	netherite sword	slime block	left handed	gold helmet	phantom
Alex	diamond pickaxe	glowstone	left handed	iron helmet	creeper
Ranboo	iron axe	redstone block	right handed	gold helmet	phantom
Impulse	diamond pickaxe	tnt	left handed	iron helmet	enderman
Etho	diamond pickaxe	obsidian	left handed	gold helmet	phantom
Steve	netherite sword	glowstone	left handed	gold helmet	creeper
Jack	netherite sword	redstone block	left handed	leather cap	creeper
Tango	netherite sword	tnt	right handed	iron helmet	creeper
Tubbo	golden shovel	glowstone	left handed	iron helmet	phantom
Scar	iron axe	redstone block	left handed	leather cap	phantom
Dan	flint and steel	tnt	left handed	iron helmet	enderman
Lizzie	iron axe	glowstone	left handed	leather cap	enderman
Gem	netherite sword	obsidian	left handed	leather cap	phantom
Grian	diamond pickaxe	slime block	right handed	leather cap	creeper
Sapnap	netherite sword	obsidian	right handed	leather cap	creeper
Sparklez	flint and steel	glowstone	left handed	gold helmet	phantom
Stampy	golden shovel	tnt	left handed	gold helmet	phantom
Mumbo	golden shovel	redstone block	left handed	leather cap	enderman
Pearl	golden shovel	tnt	right handed	leather cap	enderman

CLUE 1 Addition

We need to count all the cobblestone blocks in the chests. Help me add the stacks to find the first clue.

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

T														
27	38	33	49	94	58	33	88	33	94	38	61	46	56	29

46	23	58	22	33	30	23	29	65	83	46

$8 + 19 = \square \rightarrow$ T	$38 + 23 = \square \rightarrow$ A	$8 + 14 = \square \rightarrow$ M
$10 + 23 = \square \rightarrow$ E	$45 + 49 = \square \rightarrow$ R	$56 + 32 = \square \rightarrow$ F
$29 + 29 = \square \rightarrow$ I	$28 + 37 = \square \rightarrow$ C	$11 + 18 = \square \rightarrow$ O
$38 + 45 = \square \rightarrow$ K	$22 + 24 = \square \rightarrow$ S	$27 + 29 = \square \rightarrow$ N
$20 + 10 = \square \rightarrow$ B	$14 + 35 = \square \rightarrow$ G	$26 + 12 = \square \rightarrow$ H
$15 + 8 = \square \rightarrow$ L		

Scratch space:

CLUE 2

Subtraction

A zombie stole some iron bars from our inventory! Let us subtract the missing metal to get the next hint.

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

L																			
53	51	46	85	20	24	67	38	51	38	80	29	27	67	14	52	24	64	88	80

78	67	85	64	51

$84 - 31 = \square \rightarrow \boxed{\text{L}}$

$78 - 26 = \square \rightarrow \boxed{\text{M}}$

$33 - 4 = \square \rightarrow \boxed{\text{W}}$

$44 - 24 = \square \rightarrow \boxed{\text{H}}$

$20 - 6 = \square \rightarrow \boxed{\text{G}}$

$115 - 30 = \square \rightarrow \boxed{\text{T}}$

$87 - 9 = \square \rightarrow \boxed{\text{O}}$

$59 - 8 = \square \rightarrow \boxed{\text{E}}$

$99 - 11 = \square \rightarrow \boxed{\text{K}}$

$86 - 40 = \square \rightarrow \boxed{\text{F}}$

$94 - 30 = \square \rightarrow \boxed{\text{R}}$

$114 - 34 = \square \rightarrow \boxed{\text{S}}$

$57 - 30 = \square \rightarrow \boxed{\text{I}}$

$103 - 36 = \square \rightarrow \boxed{\text{N}}$

$36 - 12 = \square \rightarrow \boxed{\text{A}}$

$46 - 8 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

The wheat garden is planted in perfect rows. Multiply the rows by the columns to unlock the third clue.

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

F									F										
25	100	42	60	100	108	55	7	100	25	64	36	49	44	77	44	49	77	7	55
21	121	44	81	55	100	60	81												

$5 \times 5 = \square \rightarrow \mathbf{F}$	$8 \times 8 = \square \rightarrow \mathbf{L}$	$4 \times 11 = \square \rightarrow \mathbf{N}$	$7 \times 6 = \square \rightarrow \mathbf{A}$
$5 \times 11 = \square \rightarrow \mathbf{T}$	$7 \times 11 = \square \rightarrow \mathbf{G}$	$3 \times 7 = \square \rightarrow \mathbf{M}$	
$12 \times 3 = \square \rightarrow \mathbf{Y}$	$12 \times 9 = \square \rightarrow \mathbf{D}$	$10 \times 6 = \square \rightarrow \mathbf{R}$	
$9 \times 9 = \square \rightarrow \mathbf{S}$	$7 \times 7 = \square \rightarrow \mathbf{I}$	$10 \times 10 = \square \rightarrow \mathbf{E}$	
$1 \times 7 = \square \rightarrow \mathbf{H}$	$11 \times 11 = \square \rightarrow \mathbf{O}$		

Scratch space:

CLUE 4

Place value

We found some redstone torches. Count the tens and ones in the pile to read the next message.

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

Y																	
73	47	36	36	35	96	64	35	36	99	47	26	99	69	33	52	57	52
52	84	47	99	35	35	16											

What number has 7 tens and 3 ones?

→ Y

What number has 3 tens and 6 ones?

→ L

What number has 1 ten and 6 ones?

→ R

What number has 9 tens and 6 ones?

→ W

What number has 3 tens and 5 ones?

→ O

What number has 6 tens and 9 ones?

→ U

What number has 5 tens and 2 ones?

→ T

What number has 2 tens and 6 ones?

→ N

What number has 3 tens and 3 ones?

→ S

What number has 8 tens and 4 ones?

→ H

What number has 4 tens and 7 ones?

→ E

What number has 5 tens and 7 ones?

→ A

What number has 9 tens and 9 ones?

→ D

What number has 6 tens and 4 ones?

→ G

Scratch space:

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

We must share these diamonds equally among the villagers. Divide the loot to find 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:

$55 \div 11 = \square$

$100 \div 10 = \square$

$18 \div 3 = \square$

$72 \div 8 = \square$

$8 \div 2 = \square$

$88 \div 11 = \square$

$20 \div 10 = \square$

$84 \div 12 = \square$

$11 \div 11 = \square$

$24 \div 2 = \square$

$33 \div 3 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain chopped down the wooden door, then blocked the exit with obsidian.
2. The villain sliced through the wool blocks, then blocked the exit with obsidian.
3. The villain chopped down the wooden door, then powered a trap with redstone.
4. The villain dug a giant pit, then blocked the exit with obsidian.
5. The villain mined a secret tunnel, then blocked the exit with obsidian.
6. The villain dug a giant pit, then blew open the wall with tnt.
7. The villain burned the wool defense wall, then blew open the wall with tnt.
8. The villain chopped down the wooden door, then blew open the wall with tnt.
9. The villain mined a secret tunnel, then blew open the wall with tnt.
10. The villain burned the wool defense wall, then lit the room with glowstone.
11. The villain chopped down the wooden door, then lit the room with glowstone.
12. The villain mined a secret tunnel, then bounced away on a slime block.

Answer Key

The Missing Golden Apple

Culprit: Dream

iron axe · redstone block · left handed · gold helmet · phantom

Trail: Start 21 → Clue 1 18 → Clue 2 14 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE GRIEFER HAS NO SLIME BLOCKS"

$8 + 19 = 27$ (T) · $38 + 23 = 61$ (A) · $8 + 14 = 22$ (M) · $10 + 23 = 33$ (E) · $45 + 49 = 94$ (R) · $56 + 32 = 88$ (F) · $29 + 29 = 58$ (I) · $28 + 37 = 65$ (C) · $11 + 18 = 29$ (O) · $38 + 45 = 83$ (K) · $22 + 24 = 46$ (S) · $27 + 29 = 56$ (N) · $20 + 10 = 30$ (B) · $14 + 35 = 49$ (G) · $26 + 12 = 38$ (H) · $15 + 8 = 23$ (L)

Clue 2 (Subtraction): "LEFT HANDED SWING MARKS ON TREE"

$84 - 31 = 53$ (L) · $78 - 26 = 52$ (M) · $33 - 4 = 29$ (W) · $44 - 24 = 20$ (H) · $20 - 6 = 14$ (G) · $115 - 30 = 85$ (T) · $87 - 9 = 78$ (O) · $59 - 8 = 51$ (E) · $99 - 11 = 88$ (K) · $86 - 40 = 46$ (F) · $94 - 30 = 64$ (R) · $114 - 34 = 80$ (S) · $57 - 30 = 27$ (I) · $103 - 36 = 67$ (N) · $36 - 12 = 24$ (A) · $46 - 8 = 38$ (D)

Clue 3 (Multiplication facts (1-12)): "FEARED THE FLYING NIGHT MONSTERS"

$5 \times 5 = 25$ (F) · $8 \times 8 = 64$ (L) · $4 \times 11 = 44$ (N) · $7 \times 6 = 42$ (A) · $5 \times 11 = 55$ (T) · $7 \times 11 = 77$ (G) · $3 \times 7 = 21$ (M) · $12 \times 3 = 36$ (Y) · $12 \times 9 = 108$ (D) · $10 \times 6 = 60$ (R) · $9 \times 9 = 81$ (S) · $7 \times 7 = 49$ (I) · $10 \times 10 = 100$ (E) · $1 \times 7 = 7$ (H) · $11 \times 11 = 121$ (O)

Clue 4 (Place value): "YELLOW GOLDEN DUST AT THE DOOR"

What number has 7 tens and 3 ones? = 73 (Y) · What number has 3 tens and 6 ones? = 36 (L) · What number has 1 ten and 6 ones? = 16 (R) · What number has 9 tens and 6 ones? = 96 (W) · What number has 3 tens and 5 ones? = 35 (O) · What number has 6 tens and 9 ones? = 69 (U) · What number has 5 tens and 2 ones? = 52 (T) · What number has 2 tens and 6 ones? = 26 (N) · What number has 3 tens and 3 ones? = 33 (S) · What number has 8 tens and 4 ones? = 84 (H) · What number has 4 tens and 7 ones? = 47 (E) · What number has 5 tens and 7 ones? = 57 (A) · What number has 9 tens and 9 ones? = 99 (D) · What number has 6 tens and 4 ones? = 64 (G)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Dream

$55 \div 11 = 5$ · $100 \div 10 = 10$ · $18 \div 3 = 6$ · $72 \div 8 = 9$ · $8 \div 2 = 4$ · $88 \div 11 = 8$ · $20 \div 10 = 2$ · $84 \div 12 = 7$ · $11 \div 11 = 1$ · $24 \div 2 = 12$ · $33 \div 3 = 11$