



The Mystery of the Broken Diamond Castle

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

Detective: _____ Date: _____

Oh no! A sneaky player has grieved the Server Host's giant diamond castle! They knocked down walls and stole the Golden Apple. We need to find the culprit!

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 Griefing Mob is _____

Possible suspects

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

NAME	FAVORITE TOOL	SPAWNED PET	ACTIVE HAND	HELMET TYPE	FEAR
Alex	Stone Hoe	Friendly Bee	Right Handed	Leather Cap	Deep Lava
Aphmau	Netherite Axe	Friendly Bee	Right Handed	Leather Cap	Water Buckets
Mumbo	Diamond Pickaxe	Green Creeper	Right Handed	Leather Cap	Water Buckets
Skeppy	Stone Hoe	Baby Zombie	Left Handed	Iron Helmet	Deep Lava
Jerome	Golden Shovel	Cute Ocelot	Right Handed	Leather Cap	Hissing Creepers
Sparklez	Diamond Pickaxe	Cute Ocelot	Right Handed	Leather Cap	Water Buckets
Tommy	Iron Sword	Green Creeper	Right Handed	Iron Helmet	Hissing Creepers
Wilbur	Netherite Axe	Cute Ocelot	Right Handed	Leather Cap	Water Buckets
BadBoy	Iron Sword	Friendly Bee	Right Handed	Iron Helmet	Deep Lava
George	Stone Hoe	Green Creeper	Right Handed	Iron Helmet	Hissing Creepers
Steve	Stone Hoe	Baby Zombie	Left Handed	Leather Cap	Water Buckets
AntVenom	Golden Shovel	Baby Zombie	Right Handed	Leather Cap	Water Buckets
Preston	Stone Hoe	Tamed Wolf	Right Handed	Gold Crown	Deep Lava
Tubbo	Golden Shovel	Friendly Bee	Left Handed	Gold Crown	Water Buckets
Techno	Iron Sword	Tamed Wolf	Left Handed	Iron Helmet	Deep Lava
Ssundee	Netherite Axe	Baby Zombie	Left Handed	Leather Cap	Hissing Creepers
Dream	Stone Hoe	Tamed Wolf	Left Handed	Leather Cap	Water Buckets
Stampy	Iron Sword	Cute Ocelot	Right Handed	Gold Crown	Water Buckets
Bajan	Netherite Axe	Baby Zombie	Right Handed	Gold Crown	Water Buckets
Unspeak	Golden Shovel	Friendly Bee	Right Handed	Gold Crown	Hissing Creepers
LDShadow	Diamond Pickaxe	Baby Zombie	Left Handed	Leather Cap	Hissing Creepers

CLUE 1 Addition

We found some redstone dust on the ground. Let us add the red piles and blue piles to find the first clue.

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

T								T										
8	10	6	3	14	4	12	4	8	10	13	20	6	13	11	18	6	6	12

										T
2	18	6	6	17	6	18	17	6	8	

$4 + 4 = \square \rightarrow$ T	$8 + 10 = \square \rightarrow$ R	$2 + 2 = \square \rightarrow$ O	
$10 + 7 = \square \rightarrow$ P	$2 + 1 = \square \rightarrow$ Y	$5 + 5 = \square \rightarrow$ H	$5 + 1 = \square \rightarrow$ E
$9 + 3 = \square \rightarrow$ N	$7 + 6 = \square \rightarrow$ A	$13 + 7 = \square \rightarrow$ V	$1 + 1 = \square \rightarrow$ C
$5 + 9 = \square \rightarrow$ D	$6 + 5 = \square \rightarrow$ G		

Scratch space:

Subtraction

The villain broke some glass blocks in the castle. Subtract the broken blocks from the total to get the next clue.

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

18 10 5 19

9 2 4 3 11 5 6

9 2 4 12 17

12 1 18 10

$$19 - 1 = \boxed{} \rightarrow \boxed{\text{T}}$$

$12 - 3 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$14 - 2 = \boxed{} \rightarrow \boxed{\mathbf{W}}$

$12 - 7 = \boxed{} \rightarrow \boxed{\text{E}}$

$13 - 6 = \boxed{} \rightarrow \boxed{\text{A}}$

$12 - 4 = \square \rightarrow \mathbf{G}$

$8 - 2 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$5 - 3 = \square \rightarrow \boxed{\text{L}}$

$9 - 6 = \square \rightarrow \boxed{\text{C}}$

$12 - 8 = \boxed{} \rightarrow \boxed{0}$

$17 - 2 = \boxed{} \rightarrow \boxed{\text{R}}$

$$2 - 1 = \boxed{} \rightarrow \boxed{1}$$

$19 - 3 = \square \rightarrow \boxed{\mathbf{N}}$

$19 - 2 = \square \rightarrow \boxed{\text{S}}$

$$20 - 1 = \boxed{} \rightarrow \boxed{\text{Y}}$$

$14 - 3 = \boxed{} \rightarrow \boxed{\text{K}}$

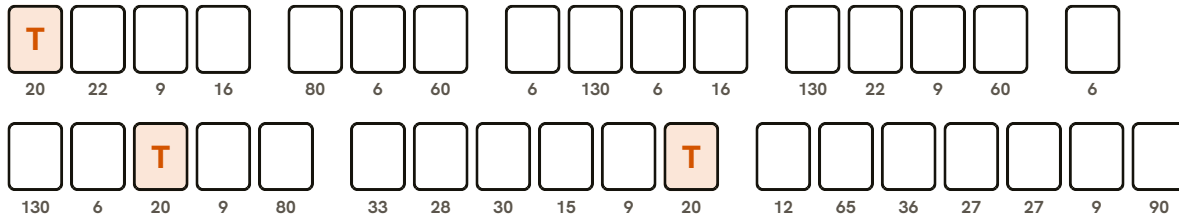
$$11 - 1 = \boxed{} \rightarrow \boxed{\text{H}}$$

Scratch space:

CLUE 3 Skip counting

Look at these torch paths! If we skip count the torches by twos, we will find where the villain went.

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



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

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **K**

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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 → **E**

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

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

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **W**

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

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

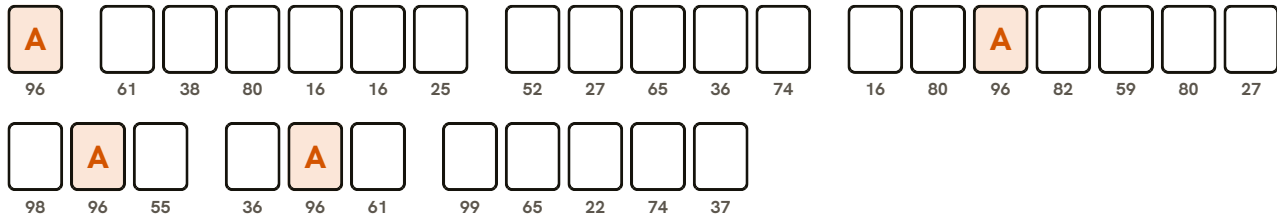
Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **C**

Scratch space:

CLUE 4 Place value

There is a chest of cobblestone. Count the big stacks of ten and single blocks to reveal the next hint.

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



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

What number has 9 tens and 8 ones? → **C**

What number has 1 ten and 6 ones? → **L**

What number has 9 tens and 9 ones? → **F**

What number has 2 tens and 7 ones? → **R**

What number has 6 tens and 1 one? → **S**

What number has 5 tens and 5 ones? → **P**

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

What number has 8 tens and 0 ones? → **E**

What number has 2 tens and 2 ones? → **U**

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

What number has 6 tens and 5 ones? → **O**

What number has 3 tens and 7 ones? → **D**

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

What number has 3 tens and 8 ones? → **M**

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

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

What number has 3 tens and 6 ones? → **W**

Scratch space:

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

To open this secret door, we need some more iron bars. How many more do we need to make ten? Find that number for the last 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:

$6 + \underline{\quad} = 11$

$6 + \underline{\quad} = 18$

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

$4 + \underline{\quad} = 7$

$8 + \underline{\quad} = 9$

$1 + \underline{\quad} = 9$

$1 + \underline{\quad} = 11$

$2 + \underline{\quad} = 13$

$8 + \underline{\quad} = 17$

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

$8 + \underline{\quad} = 15$

Step 2 - cross out the sentence with each answer:

1. The villain slashed an iron sword, then fed a cute ocelot.
2. The villain chopped with a netherite axe, then fed a cute ocelot.
3. The villain slashed an iron sword, then ran past a green creeper.
4. The villain slashed an iron sword, then buzzed with a friendly bee.
5. The villain swung a shiny diamond pickaxe, then fed a cute ocelot.
6. The villain chopped with a netherite axe, then buzzed with a friendly bee.
7. The villain swung a shiny diamond pickaxe, then ran past a green creeper.
8. The villain scraped a stone hoe, then summoned a baby zombie.
9. The villain swung a shiny diamond pickaxe, then called a tamed wolf.
10. The villain chopped with a netherite axe, then called a tamed wolf.
11. The villain scraped a stone hoe, then fed a cute ocelot.
12. The villain dug with a golden shovel, then summoned a baby zombie.

Answer Key

The Mystery of the Broken Diamond Castle

Culprit: Aphmau

Netherite Axe · Friendly Bee · Right Handed · Leather Cap · Water Buckets

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THEY DO NOT HAVE A GREEN CREEPER PET"

$4 + 4 = 8$ (T) · $8 + 10 = 18$ (R) · $2 + 2 = 4$ (O) · $10 + 7 = 17$ (P) · $2 + 1 = 3$ (Y) · $5 + 5 = 10$ (H) · $5 + 1 = 6$ (E) · $9 + 3 = 12$ (N) · $7 + 6 = 13$ (A) · $13 + 7 = 20$ (V) · $1 + 1 = 2$ (C) · $5 + 9 = 14$ (D) · $6 + 5 = 11$ (G)

Clue 2 (Subtraction): "THEY BLOCKED BLOWS WITH THEIR RIGHT HAND"

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

Clue 3 (Skip counting): "THEY RAN AWAY WHEN A WATER BUCKET SPILLED"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (T) · Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (I) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (H) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (R) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (C)

Clue 4 (Place value): "A SMELLY BROWN LEATHER CAP WAS FOUND"

What number has 9 tens and 6 ones? = 96 (A) · What number has 9 tens and 8 ones? = 98 (C) · What number has 1 ten and 6 ones? = 16 (L) · What number has 9 tens and 9 ones? = 99 (F) · What number has 2 tens and 7 ones? = 27 (R) · What number has 6 tens and 1 one? = 61 (S) · What number has 5 tens and 5 ones? = 55 (P) · What number has 5 tens and 2 ones? = 52 (B) · What number has 8 tens and 0 ones? = 80 (E) · What number has 2 tens and 2 ones? = 22 (U) · What number has 5 tens and 9 ones? = 59 (H) · What number has 6 tens and 5 ones? = 65 (O) · What number has 3 tens and 7 ones? = 37 (D) · What number has 2 tens and 5 ones? = 25 (Y) · What number has 3 tens and 8 ones? = 38 (M) · What number has 7 tens and 4 ones? = 74 (N) · What number has 8 tens and 2 ones? = 82 (T) · What number has 3 tens and 6 ones? = 36 (W)

Clue 5 (Missing addends): surviving statement is box 6 → Aphmau

$6 + \underline{\quad} = 11 = 5$ · $6 + \underline{\quad} = 18 = 12$ · $5 + \underline{\quad} = 7 = 2$ · $4 + \underline{\quad} = 7 = 3$ · $8 + \underline{\quad} = 9 = 1$ · $1 + \underline{\quad} = 9 = 8$ · $1 + \underline{\quad} = 11 = 10$ · $2 + \underline{\quad} = 13 = 11$ · $8 + \underline{\quad} = 17 = 9$ · $8 + \underline{\quad} = 12 = 4$ · $8 + \underline{\quad} = 15 = 7$