

The Spawn Castle Mystery

Grade 6 math · Place value, Bar models, Word problems, Skip counting, Division · Reading level grades 5-6

Detective: _____ Date: _____

A mysterious rogue player has grieved the Grand Spawn Castle on the Blocktopia server, making off with the rare Dragon Egg. The Server Administrator needs your help to track down the suspect before the server resets!

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 Phantom is _____

Possible suspects

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

NAME	PRIMARY WEAPON	OFFHAND ITEM	ACTIVE HAND	HELMET TYPE	IN-GAME WEAKNESS
Grian	Crossbow	Totem of Undying	Right handed	Golden Helmet	Splash potions
TommyInnit	Trident	Firework Rocket	Left handed	Netherite Helmet	Lava pools
AntFrost	Trident	Totem of Undying	Left handed	Golden Helmet	Lava pools
Tubbo	Enchanted Bow	Golden Apple	Left handed	Golden Helmet	Splash potions
Wilbur	Netherite Sword	Golden Apple	Left handed	Netherite Helmet	Splash potions
Alex	Enchanted Bow	Totem of Undying	Right handed	Diamond Helmet	Splash potions
Mumbo	Enchanted Bow	Totem of Undying	Right handed	Golden Helmet	Splash potions
BadBoyHalo	Netherite Sword	Totem of Undying	Right handed	Golden Helmet	Sweet berry bushes
Ranboo	Trident	Golden Apple	Right handed	Diamond Helmet	Splash potions
Technoblade	Trident	Ender Pearl	Right handed	Diamond Helmet	Sweet berry bushes
Sapnap	Diamond Axe	Ender Pearl	Right handed	Netherite Helmet	Splash potions
Aphmau	Netherite Sword	Totem of Undying	Right handed	Diamond Helmet	Lava pools
Skeppy	Crossbow	Golden Apple	Left handed	Golden Helmet	Lava pools
Awesamdude	Diamond Axe	Firework Rocket	Right handed	Diamond Helmet	Sweet berry bushes
Dream	Trident	Firework Rocket	Right handed	Golden Helmet	Sweet berry bushes
LDShadowLady	Trident	Ender Pearl	Left handed	Golden Helmet	Splash potions
George	Crossbow	Firework Rocket	Right handed	Golden Helmet	Splash potions
DanTDM	Diamond Axe	Totem of Undying	Left handed	Diamond Helmet	Lava pools
Philza	Diamond Axe	Golden Apple	Right handed	Netherite Helmet	Splash potions
Steve	Trident	Ender Pearl	Right handed	Golden Helmet	Splash potions
Stampy	Crossbow	Golden Apple	Right handed	Golden Helmet	Splash potions

CLUE 1

We found a coordinate log on the command block. The digits representing the coordinate numbers are grouped by hundreds, tens, and ones.

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

1000	400	4000
5000	800	4000

What is the value of the 1 in 881,585? → **T**

What is the value of the 8 in 11,582? → **D**

What is the value of the 4 in 52,477? → **H**

What is the value of the 5 in 85,084? →

What is the value of the 2 in 961,724? →

What is the value of the 8 in 253,834? → **S**

What is the value of the 2 in 82,776? → **G**

What is the value of the 2 in 580,267? →

What is the value of the 6 in 196,450? →

What is the value of the 4 in 68,048? →

What is the value of the 4 in 654,727? → **E**

What is the value of the 1 in 733,418? → **N**

What is the value of the 3 in 557,346? → **P**

What is the value of the 5 in 92,520? → **A**

Scratch space:

CLUE 3

Word problems

A local villager claims they traded blocks with the suspect. Let us calculate the emerald costs to find the next lead.

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

Someone scared the villain off with S S I N S .

36 55 32 29 36 66 55 93 62 93 36

Alex lined up 6 rows of 6 redstone dust. How many redstone dust in all?

Answer: → S

Alex found 35 obsidian blocks yesterday and 27 more today. How many obsidian blocks in all?

Answer: → T

Alex found 8 emeralds yesterday and 21 more today. How many emeralds in all?

Answer: → A

There were 89 golden carrots. 23 were used up. How many golden carrots are left?

Answer: → H

Alex found 14 golden carrots yesterday and 79 more today. How many golden carrots in all?

Answer: → O

There were 67 golden carrots. 35 were used up. How many golden carrots are left?

Answer: → L

Alex lined up 5 rows of 11 diamonds. How many diamonds in all?

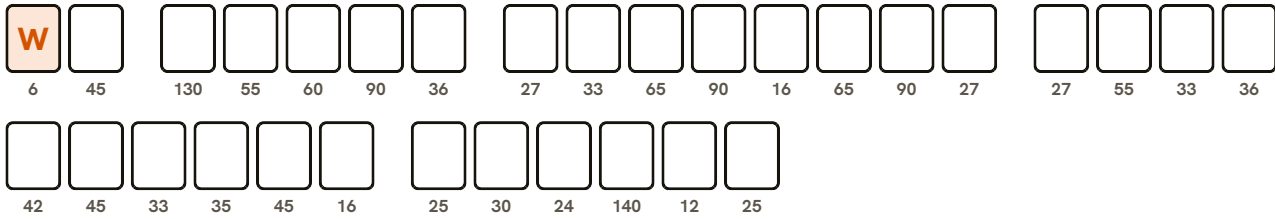
Answer: → P

Scratch space:

CLUE 4 Skip counting

The thief escaped down a long minecart track. We can count the powered rails spaced out in even intervals to see how far they got.

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, __, 8, 10 → **W**

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

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

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

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

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

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

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

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **A**

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **R**

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

Scratch space:

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

We found a pile of stolen diamonds divided equally into several chest slots. Let us divide the total to find the share size.

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:

$120 \div 10 = \boxed{}$

$72 \div 8 = \boxed{}$

$88 \div 8 = \boxed{}$

$8 \div 4 = \boxed{}$

$60 \div 12 = \boxed{}$

$8 \div 2 = \boxed{}$

$40 \div 4 = \boxed{}$

$1 \div 1 = \boxed{}$

$14 \div 2 = \boxed{}$

$72 \div 12 = \boxed{}$

$8 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain shoots spectral arrows, then teleports away using an ender pearl.
2. The villain fires a burst of fireworks, then blocks incoming arrows with a shield.
3. The villain shoots spectral arrows, then revives instantly with a totem.
4. The villain slashes through obsidian, then boosts into the sky with a rocket.
5. The villain shoots spectral arrows, then blocks incoming arrows with a shield.
6. The villain slashes through obsidian, then eats a glowing golden apple.
7. The villain fires a burst of fireworks, then teleports away using an ender pearl.
8. The villain slashes through obsidian, then teleports away using an ender pearl.
9. The villain fires a burst of fireworks, then revives instantly with a totem.
10. The villain slashes through obsidian, then blocks incoming arrows with a shield.
11. The villain fires a burst of fireworks, then boosts into the sky with a rocket.
12. The villain hurls a loyalty trident, then teleports away using an ender pearl.

Answer Key

The Spawn Castle Mystery

Culprit: Mumbo

Enchanted Bow · Totem of Undying · Right handed · Golden Helmet · Splash potions

Trail: Start 21 → Clue 1 15 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE A GOLDEN APPLE"

What is the value of the 1 in 881,585? = 1000 (T) · What is the value of the 8 in 11,582? = 80 (D) · What is the value of the 4 in 52,477? = 400 (H) · What is the value of the 5 in 85,084? = 5000 (U) · What is the value of the 2 in 961,724? = 20 (L) · What is the value of the 8 in 253,834? = 800 (S) · What is the value of the 2 in 82,776? = 2000 (G) · What is the value of the 2 in 580,267? = 200 (I) · What is the value of the 6 in 196,450? = 6000 (V) · What is the value of the 4 in 68,048? = 40 (O) · What is the value of the 4 in 654,727? = 4000 (E) · What is the value of the 1 in 733,418? = 10 (N) · What is the value of the 3 in 557,346? = 300 (P) · What is the value of the 5 in 92,520? = 500 (A)

Clue 2 (Bar model word problems): "RIGHT HANDED"

The red team has 22 golden carrots and the blue team has 5 golden carrots. How many more golden carrots does the red team have? = 17 (R) · One group collected 42 golden carrots and another group collected 62 golden carrots. How many golden carrots in all? = 104 (I) · Alex has 190 redstone dust, packed 2 to a bag. How many bags can be filled? = 95 (T) · The red team has 166 golden carrots and the blue team has 26 golden carrots. How many more golden carrots does the red team have? = 140 (N) · The red team has 20 diamonds and the blue team has 9 diamonds. How many more diamonds does the red team have? = 11 (G) · One group collected 85 redstone dust and another group collected 57 redstone dust. How many redstone dust in all? = 142 (A) · The red team has 149 obsidian blocks and the blue team has 17 obsidian blocks. How many more obsidian blocks does the red team have? = 132 (H)

Clue 3 (Word problems): "SPLASH POTIONS"

Alex lined up 6 rows of 6 redstone dust. How many redstone dust in all? = 36 (S) · Alex found 35 obsidian blocks yesterday and 27 more today. How many obsidian blocks in all? = 62 (T) · Alex found 8 emeralds yesterday and 21 more today. How many emeralds in all? = 29 (A) · There were 89 golden carrots. 23 were used up. How many golden carrots are left? = 66 (H) · Alex found 14 golden carrots yesterday and 79 more today. How many golden carrots in all? = 93 (O) · There were 67 golden carrots. 35 were used up. How many golden carrots are left? = 32 (L) · Alex lined up 5 rows of 11 diamonds. How many diamonds in all? = 55 (P)

Clue 4 (Skip counting): "WE FOUND GLINTING GOLD HELMET SCRAPS"

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 = 30 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (M) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 = 24 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (F)

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

$120 \div 10 = 12$ · $72 \div 8 = 9$ · $88 \div 8 = 11$ · $8 \div 4 = 2$ · $60 \div 12 = 5$ · $8 \div 2 = 4$ · $40 \div 4 = 10$ · $1 \div 1 = 1$ · $14 \div 2 = 7$ · $72 \div 12 = 6$ · $8 \div 1 = 8$