The Mystery of the Missing Dragon Egg

Grade 7 math · Addition, Multiplication, Rounding, Word problems, Division · Reading level grades 7-9

Detective: _____ **Date:** _____

During the annual Square Peak Building Contest, someone breached the Admin Vault and stole the sacred Dragon Egg trophy. The server logs are corrupted, but by solving the math clues and analyzing pixel traces around the griefed site, you can catch the culprit 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 griefer is _____

Possible suspects

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

NAME	MAIN GEAR	HELD ITEM	MAIN HAND	HAIR TRIM	VULNERABILITY
Dan TDM	Elytra Glider	Totem of Undying	Right Main Hand	Blocky Blonde Hair	Milk Bucket
Techno Blade	Diamond Chestplate	Golden Apple	Right Main Hand	Blocky Blonde Hair	Milk Bucket
Philza Craft	Turtle Helmet	Splash Potion	Right Main Hand	Pixel Blue Hair	Splash Water
Pearl Moon	Diamond Chestplate	Ender Pearl	Left Main Hand	Emerald Green Trim	Berry Bush
Aphmau Ridge	Turtle Helmet	Totem of Undying	Left Main Hand	Pixel Blue Hair	Berry Bush
Grian Builder	Netherite Blade	Firework Rocket	Left Main Hand	Pixel Blue Hair	Splash Water
Impulse SV	Diamond Chestplate	Firework Rocket	Left Main Hand	Pixel Blue Hair	Berry Bush
Keralis Eye	Netherite Blade	Totem of Undying	Right Main Hand	Pixel Blue Hair	Milk Bucket
Scott Smajor	Netherite Blade	Splash Potion	Right Main Hand	Emerald Green Trim	Milk Bucket
Stampy Miner	Netherite Blade	Golden Apple	Left Main Hand	Emerald Green Trim	Milk Bucket
Etho Slab	Redstone Pulse	Splash Potion	Left Main Hand	Pixel Blue Hair	Milk Bucket
Captain Spark	Elytra Glider	Firework Rocket	Left Main Hand	Pixel Blue Hair	Berry Bush
Scar Good	Elytra Glider	Firework Rocket	Left Main Hand	Pixel Blue Hair	Milk Bucket
Ranboo Void	Diamond Chestplate	Ender Pearl	Right Main Hand	Pixel Blue Hair	Berry Bush
Steve Crafton	Diamond Chestplate	Totem of Undying	Left Main Hand	Pixel Blue Hair	Milk Bucket
Alex Blockley	Elytra Glider	Golden Apple	Right Main Hand	Pixel Blue Hair	Milk Bucket
Mumbo Redstone	Turtle Helmet	Ender Pearl	Right Main Hand	Blocky Blonde Hair	Milk Bucket
Shubble Wood	Turtle Helmet	Ender Pearl	Left Main Hand	Pixel Blue Hair	Milk Bucket
Tubbo Bee	Netherite Blade	Totem of Undying	Left Main Hand	Blocky Blonde Hair	Berry Bush
Bdubs Castle	Elytra Glider	Golden Apple	Left Main Hand	Pixel Blue Hair	Milk Bucket
Gemini Tay	Diamond Chestplate	Totem of Undying	Right Main Hand	Pixel Blue Hair	Splash Water

make your own at mathcrackers.com

CLUE 1 Addition

> You inspect the broken vault doors and tally up the scattered redstone dust piles left near the crafting table to uncover a clue.

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



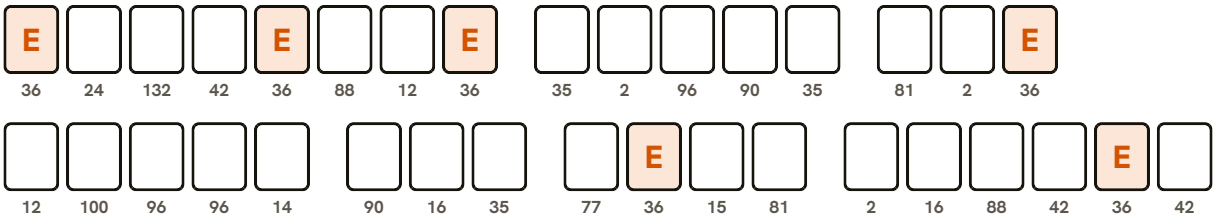
2812 + 4327 = ☐ → T	3553 + 4995 = ☐ → R	812 + 1787 = ☐ → S
5928 + 3762 = ☐ → O	2845 + 4087 = ☐ → H	4865 + 2874 = ☐ → Y
4747 + 2360 = ☐ → A	2155 + 4768 = ☐ → N	5110 + 2901 = ☐ → C
2153 + 926 = ☐ → V	1790 + 1998 = ☐ → E	2843 + 2538 = ☐ → P
1386 + 1961 = ☐ → L	3639 + 3217 = ☐ → D	2805 + 2200 = ☐ → I

Scratch space:

CLUE 2 Multiplication facts (1-12)

> By calculating the grid dimensions of the suspect's double chest storage system, you decode an encoded message.

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



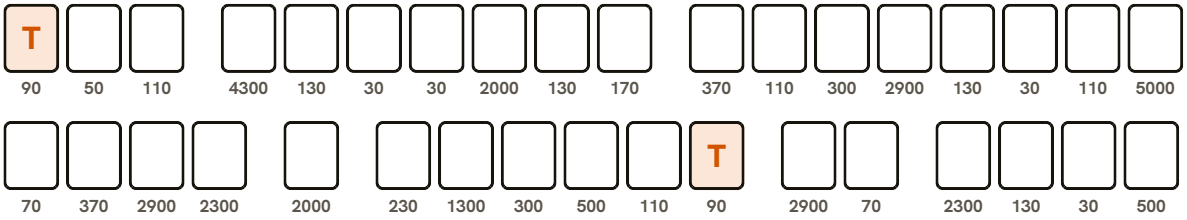
4 × 9 = ☐ → E	7 × 5 = ☐ → S	9 × 10 = ☐ → W	2 × 7 = ☐ → K
2 × 12 = ☐ → V	2 × 1 = ☐ → H	6 × 7 = ☐ → D	
7 × 11 = ☐ → L	8 × 2 = ☐ → A	10 × 10 = ☐ → R	
8 × 12 = ☐ → O	9 × 9 = ☐ → T	11 × 12 = ☐ → I	
8 × 11 = ☐ → N	5 × 3 = ☐ → F	3 × 4 = ☐ → C	

Scratch space:

CLUE 3 Rounding

The server log radar only displays rounded chunk coordinates, forcing you to estimate the culprit's location.

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



Round 94 to the nearest ten ☐ → T

Round 52 to the nearest ten ☐ → H

Round 233 to the nearest ten ☐ → B

Round 285 to the nearest hundred ☐ → C

Round 366 to the nearest ten ☐ → R

Round 28 to the nearest ten ☐ → L

Round 112 to the nearest ten ☐ → E

Round 2,943 to the nearest hundred ☐ → O

Round 132 to the nearest ten ☐ → I

Round 1,256 to the nearest hundred ☐ → U

Round 66 to the nearest ten ☐ → F

Round 4,305 to the nearest hundred ☐ → V

Round 169 to the nearest ten ☐ → N

Round 5,256 to the nearest thousand ☐ → D

Round 2,308 to the nearest hundred ☐ → M

Round 498 to the nearest hundred ☐ → K

Round 1,824 to the nearest thousand ☐ → A

Scratch space:

CLUE 4 Word problems

Balancing the inventory stacks of iron ingots and emeralds reveals a crucial pattern in the guild ledger.

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

A strand of

P									H	A		R
84	85	114	67	29	46	29	39	67			85	

hair turned up at the scene.

Guild Architect lined up 7 rows of 12 oak logs. How many oak logs in all?

Answer: ☐ → **P**

Guild Architect found 88 redstone dust yesterday and 26 more today. How many redstone dust in all?

Answer: ☐ → **X**

Guild Architect found 2 redstone dust yesterday and 37 more today. How many redstone dust in all?

Answer: ☐ → **U**

Guild Architect found 76 iron ingots yesterday and 9 more today. How many iron ingots in all?

Answer: ☐ → **I**

Guild Architect found 11 redstone dust yesterday and 18 more today. How many redstone dust in all?

Answer: ☐ → **L**

Guild Architect found 44 lapis lazuli yesterday and 23 more today. How many lapis lazuli in all?

Answer: ☐ → **E**

There were 62 redstone dust. 16 were used up. How many redstone dust are left?

Answer: ☐ → **B**

Scratch space:

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

> Dividing the remaining beacon crystals evenly among the builder teams yields the final secret key.

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:

14 ÷ 7 = ☐	96 ÷ 12 = ☐	63 ÷ 9 = ☐	12 ÷ 3 = ☐	55 ÷ 11 = ☐
20 ÷ 2 = ☐	22 ÷ 2 = ☐	72 ÷ 12 = ☐	63 ÷ 7 = ☐	11 ÷ 11 = ☐
9 ÷ 3 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain soared with an elytra glider, then clutched a totem of undying.
2. The villain equipped a turtle helmet, then tossed an ender pearl.
3. The villain swung a netherite blade, then clutched a totem of undying.
4. The villain donned a diamond chestplate, then ignited a firework rocket.
5. The villain equipped a turtle helmet, then ignited a firework rocket.
6. The villain equipped a turtle helmet, then ate a golden apple.
7. The villain soared with an elytra glider, then ignited a firework rocket.
8. The villain soared with an elytra glider, then ate a golden apple.
9. The villain donned a diamond chestplate, then tossed an ender pearl.
10. The villain wired a redstone circuit, then ate a golden apple.
11. The villain swung a netherite blade, then tossed an ender pearl.
12. The villain donned a diamond chestplate, then clutched a totem of undying.

TEACHER / PARENT

Answer Key

The Mystery of the Missing Dragon Egg

Culprit: Steve Crafton

Diamond Chestplate · Totem of Undying · Left Main Hand · Pixel Blue Hair · Milk Bucket

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

Clue 1 (Addition): "THE VILLAIN DOES NOT CARRY SPLASH POTIONS"

2812 + 4327 = 7139 (T) · 3553 + 4995 = 8548 (R) · 812 + 1787 = 2599 (S) · 5928 + 3762 = 9690 (O) · 2845 + 4087 = 6932 (H) · 4865 + 2874 = 7739 (Y) · 4747 + 2360 = 7107 (A) · 2155 + 4768 = 6923 (N) · 5110 + 2901 = 8011 (C) · 2153 + 926 = 3079 (V) · 1790 + 1998 = 3788 (E) · 2843 + 2538 = 5381 (P) · 1386 + 1961 = 3347 (L) · 3639 + 3217 = 6856 (D) · 2805 + 2200 = 5005 (I)

Clue 2 (Multiplication facts (1-12)): "EVIDENCE SHOWS THE CROOK WAS LEFT HANDED"

4 × 9 = 36 (E) · 7 × 5 = 35 (S) · 9 × 10 = 90 (W) · 2 × 7 = 14 (K) · 2 × 12 = 24 (V) · 2 × 1 = 2 (H) · 6 × 7 = 42 (D) · 7 × 11 = 77 (L) · 8 × 2 = 16 (A) · 10 × 10 = 100 (R) · 8 × 12 = 96 (O) · 9 × 9 = 81 (T) · 11 × 12 = 132 (I) · 8 × 11 = 88 (N) · 5 × 3 = 15 (F) · 3 × 4 = 12 (C)

Clue 3 (Rounding): "THE VILLAIN RECOILED FROM A BUCKET OF MILK"

Round 94 to the nearest ten = 90 (T) · Round 52 to the nearest ten = 50 (H) · Round 233 to the nearest ten = 230 (B) · Round 285 to the nearest hundred = 300 (C) · Round 366 to the nearest ten = 370 (R) · Round 28 to the nearest ten = 30 (L) · Round 112 to the nearest ten = 110 (E) · Round 2,943 to the nearest hundred = 2900 (O) · Round 132 to the nearest ten = 130 (I) · Round 1,256 to the nearest hundred = 1300 (U) · Round 66 to the nearest ten = 70 (F) · Round 4,305 to the nearest hundred = 4300 (V) · Round 169 to the nearest ten = 170 (N) · Round 5,256 to the nearest thousand = 5000 (D) · Round 2,308 to the nearest hundred = 2300 (M) · Round 498 to the nearest hundred = 500 (K) · Round 1,824 to the nearest thousand = 2000 (A)

Clue 4 (Word problems): "PIXEL BLUE HAIR"

Guild Architect lined up 7 rows of 12 oak logs. How many oak logs in all? = 84 (P) · Guild Architect found 88 redstone dust yesterday and 26 more today. How many redstone dust in all? = 114 (X) · Guild Architect found 2 redstone dust yesterday and 37 more today. How many redstone dust in all? = 39 (U) · Guild Architect found 76 iron ingots yesterday and 9 more today. How many iron ingots in all? = 85 (I) · Guild Architect found 11 redstone dust yesterday and 18 more today. How many redstone dust in all? = 29 (L) · Guild Architect found 44 lapis lazuli yesterday and 23 more today. How many lapis lazuli in all? = 67 (E) · There were 62 redstone dust. 16 were used up. How many redstone dust are left? = 46 (B)

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

14 ÷ 7 = 2 · 96 ÷ 12 = 8 · 63 ÷ 9 = 7 · 12 ÷ 3 = 4 · 55 ÷ 11 = 5 · 20 ÷ 2 = 10 · 22 ÷ 2 = 11 · 72 ÷ 12 = 6 · 63 ÷ 7 = 9 · 11 ÷ 11 = 1 · 9 ÷ 3 = 3