



The Mystery of the Missing Dragon Egg

Grade 6 math · Multiplication, Percentages, Exponents, Order of operations, Division · Reading level grades 5-6

Detective: _____ Date: _____

A mysterious thief has broken into the royal fortress and stolen the legendary Ender Dragon Egg! The fortress is in absolute chaos, with blocks misplaced and redstone lines cut. As the realm's top detective, you must use your math skills to track down 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 grieving thief is _____

Possible suspects

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

NAME	PRIMARY CLASS SKILL	EQUIPPED GEAR	COMBAT HANDEDNESS	AVATAR HAIR STYLE	IN-GAME WEAKNESS
Tubbo	Commanding ender dragons	Riding a tamed ravager	Swings sword with left hand	Square blue hair	Weak to splashed water
LDShadowLady	Commanding ender dragons	Flying with elytra wings	Swings sword with right hand	Square blue hair	Afraid of glowing pandas
SethBling	Laying TNT traps	Wearing netherite armor	Swings sword with left hand	Spiky yellow hair	Allergic to sweet berries
VintageBeef	Brewing instant damage	Riding a tamed ravager	Swings sword with left hand	Square blue hair	Weak to splashed water
Etho	Teleporting with pearls	Riding a tamed ravager	Swings sword with left hand	Spiky yellow hair	Allergic to sweet berries
Ranboo	Teleporting with pearls	Wielding a fire sword	Swings sword with left hand	Blocky green hair	Afraid of glowing pandas
George	Summoning iron golems	Flying with elytra wings	Swings sword with left hand	Blocky green hair	Weak to splashed water
AntVenom	Summoning iron golems	Riding a tamed ravager	Swings sword with left hand	Spiky yellow hair	Afraid of glowing pandas
Dream	Laying TNT traps	Riding a tamed ravager	Swings sword with left hand	Spiky yellow hair	Weak to splashed water
DanTDM	Teleporting with pearls	Riding a tamed ravager	Swings sword with left hand	Square blue hair	Allergic to sweet berries
Sapnap	Laying TNT traps	Wielding a fire sword	Swings sword with right hand	Square blue hair	Allergic to sweet berries
Grian	Brewing instant damage	Flying with elytra wings	Swings sword with left hand	Square blue hair	Allergic to sweet berries
Skeppy	Laying TNT traps	Flying with elytra wings	Swings sword with left hand	Square blue hair	Allergic to sweet berries
Steve	Teleporting with pearls	Wielding a fire sword	Swings sword with right hand	Spiky yellow hair	Afraid of glowing pandas
Sparky	Laying TNT traps	Drinking speed potions	Swings sword with right hand	Blocky green hair	Afraid of glowing pandas
Stampy	Commanding ender dragons	Wielding a fire sword	Swings sword with right hand	Blocky green hair	Afraid of glowing pandas
BadBoyHalo	Brewing instant damage	Drinking speed potions	Swings sword with right hand	Spiky yellow hair	Weak to splashed water
Alex	Commanding ender dragons	Drinking speed potions	Swings sword with left hand	Square blue hair	Allergic to sweet berries
Aphmau	Commanding ender dragons	Flying with elytra wings	Swings sword with left hand	Square blue hair	Allergic to sweet berries
PopularMMOs	Summoning iron golems	Wearing netherite armor	Swings sword with right hand	Square blue hair	Afraid of glowing pandas
Sky	Summoning iron golems	Drinking speed potions	Swings sword with right hand	Square blue hair	Allergic to sweet berries

CLUE 1

Multiplication facts (1-12)

You find a stack of chest minecarts lined up in neat rows. Multiply the rows of carts to find how many diamond blocks were stolen from the vault.

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

T									T								T
96	56	48	40	90	40	16	48	25	96	54	132	48	40	84	132	96	
												T					
54	64	42	84	22	40	16	48	48	54	16	132	96	42	132	84	40	

$8 \times 12 = \square \rightarrow \boxed{\text{T}}$

$11 \times 12 = \square \rightarrow \boxed{\text{O}}$

$8 \times 8 = \square \rightarrow \boxed{\text{R}}$

$10 \times 9 = \square \rightarrow \boxed{\text{U}}$

$7 \times 8 = \square \rightarrow \boxed{\text{H}}$

$7 \times 6 = \square \rightarrow \boxed{\text{I}}$

$9 \times 6 = \square \rightarrow \boxed{\text{D}}$

$12 \times 4 = \square \rightarrow \boxed{\text{E}}$

$4 \times 10 = \square \rightarrow \boxed{\text{S}}$

$5 \times 5 = \square \rightarrow \boxed{\text{C}}$

$7 \times 12 = \square \rightarrow \boxed{\text{N}}$

$2 \times 11 = \square \rightarrow \boxed{\text{K}}$

$8 \times 2 = \square \rightarrow \boxed{\text{P}}$

Scratch space:

CLUE 2

The local redstone beacon is flickering. Calculate the percentage of fuel left in the beacon pyramid to see when the shield will power down.

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

[illegible]

40% of 60 = → **T**

20% of 115 = → **L**

20% of 70 = → **W**

20% of 25 = → **A**

50% of 58 = →

10% of 70 = → **H**

10% of 350 = → **N**

25% of 108 = → **G**

10% of 390 = → **E**

10% of 330 = → **S**

20% of 90 = → **R**

20% of 10 = → **D**

40% of 30 = → **F**

20% of 160 = →

Scratch space:

CLUE 3 Exponents

To unlock the secure vault door, you must calculate the compounding power level of this redstone repeater chain as it doubles over several blocks.

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

S											S					S			
400	289	16	16	216	81	16	25	25	64	16	400	169	243	128	16	400	216	4	16
							S												
361	64	125	125	243	64	196	400	196	16	16	343	16							

$20^2 = \square \rightarrow$ S	$4^3 = \square \rightarrow$ I	$3^4 = \square \rightarrow$ B	$5^2 = \square \rightarrow$ R
$19^2 = \square \rightarrow$ V	$7^3 = \square \rightarrow$ Z	$14^2 = \square \rightarrow$ N	$2^2 = \square \rightarrow$ H
$5^3 = \square \rightarrow$ L	$6^3 = \square \rightarrow$ T	$3^5 = \square \rightarrow$ A	$17^2 = \square \rightarrow$ W
$2^7 = \square \rightarrow$ K	$13^2 = \square \rightarrow$ M	$2^4 = \square \rightarrow$ E	

Scratch space:

CLUE 4
Order of operations

A complex crafting recipe is scribbled on a crafting table. Solve the steps in the correct order to find the recipe coordinates of the thief.

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

A						A					A				A		
25	12	14	67	34	72	25	57	38	31	64	38	25	62	68	8	25	31
14	34	56	64	52	62	64	72	34	74	72	34	31	64				

$11 \times 4 - 19 = \square \rightarrow \text{A}$

$34 + 2 \times 9 = \square \rightarrow \text{O}$

$16 + 3 \times 6 = \square \rightarrow \text{E}$

$2 + 3 \times 2 = \square \rightarrow \text{W}$

$9 \times 8 - 8 = \square \rightarrow \text{T}$

$26 + 4 \times 3 = \square \rightarrow \text{R}$

$6 \times 6 - 5 = \square \rightarrow \text{S}$

$6 \times 11 - 9 = \square \rightarrow \text{I}$

$6 + 3 \times 2 = \square \rightarrow \text{B}$

$9 \times 9 - 7 = \square \rightarrow \text{C}$

$8 \times 12 - 28 = \square \rightarrow \text{D}$

$6 \times 11 - 10 = \square \rightarrow \text{F}$

$40 + 4 \times 8 = \square \rightarrow \text{H}$

$8 \times 10 - 13 = \square \rightarrow \text{U}$

$9 \times 8 - 10 = \square \rightarrow \text{N}$

$4 \times 11 - 30 = \square \rightarrow \text{L}$

Scratch space:

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

The village library needs to divide a massive stack of emeralds equally among the guard iron golems to secure the perimeter.

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:

$55 \div 5 = \boxed{}$

$12 \div 3 = \boxed{}$

$12 \div 6 = \boxed{}$

$60 \div 6 = \boxed{}$

$24 \div 2 = \boxed{}$

$6 \div 6 = \boxed{}$

$72 \div 8 = \boxed{}$

$10 \div 2 = \boxed{}$

$48 \div 8 = \boxed{}$

$30 \div 10 = \boxed{}$

$88 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain teleports through walls using ender pearls, then runs incredibly fast using speed potions.
2. The villain lays hidden lines of TNT traps, then soars into the sky with elytra wings.
3. The villain commands a raging ender dragon, then runs incredibly fast using speed potions.
4. The villain teleports through walls using ender pearls, then escapes by riding a tamed ravager.
5. The villain summons giant iron golems to smash doors, then escapes by riding a tamed ravager.
6. The villain teleports through walls using ender pearls, then slashes the darkness with a fire sword.
7. The villain brews bubbling instant damage potions, then soars into the sky with elytra wings.
8. The villain lays hidden lines of TNT traps, then escapes by riding a tamed ravager.
9. The villain summons giant iron golems to smash doors, then runs incredibly fast using speed potions.
10. The villain summons giant iron golems to smash doors, then soars into the sky with elytra wings.
11. The villain commands a raging ender dragon, then soars into the sky with elytra wings.
12. The villain teleports through walls using ender pearls, then stomps away in heavy netherite armor.

Answer Key

The Mystery of the Missing Dragon Egg

Culprit: Grian

Brewing instant damage · Flying with elytra wings · Swings sword with left hand · Square blue hair · Allergic to sweet berries

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SUSPECT DOES NOT DRINK SPEED POTIONS"

$8 \times 12 = 96$ (T) · $11 \times 12 = 132$ (O) · $8 \times 8 = 64$ (R) · $10 \times 9 = 90$ (U) · $7 \times 8 = 56$ (H) · $7 \times 6 = 42$ (I) · $9 \times 6 = 54$ (D) · $12 \times 4 = 48$ (E) · $4 \times 10 = 40$ (S) · $5 \times 5 = 25$ (C) · $7 \times 12 = 84$ (N) · $2 \times 11 = 22$ (K) · $8 \times 2 = 16$ (P)

Clue 2 (Percentages): "THE VILLAIN SWINGS WITH THEIR LEFT HAND"

40% of 60 = 24 (T) · 20% of 115 = 23 (L) · 20% of 70 = 14 (W) · 20% of 25 = 5 (A) · 50% of 58 = 29 (V) · 10% of 70 = 7 (H) · 10% of 350 = 35 (N) · 25% of 108 = 27 (G) · 10% of 390 = 39 (E) · 10% of 330 = 33 (S) · 20% of 90 = 18 (R) · 20% of 10 = 2 (D) · 40% of 30 = 12 (F) · 20% of 160 = 32 (I)

Clue 3 (Exponents): "SWEET BERRIES MAKES THE VILLAIN SNEEZE"

$20^2 = 400$ (S) · $4^3 = 64$ (I) · $3^4 = 81$ (B) · $5^2 = 25$ (R) · $19^2 = 361$ (V) · $7^3 = 343$ (Z) · $14^2 = 196$ (N) · $2^2 = 4$ (H) · $5^3 = 125$ (L) · $6^3 = 216$ (T) · $3^5 = 243$ (A) · $17^2 = 289$ (W) · $2^7 = 128$ (K) · $13^2 = 169$ (M) · $2^4 = 16$ (E)

Clue 4 (Order of operations): "A BLUE HAIR STRAND WAS LEFT ON THE CHEST"

$11 \times 4 - 19 = 25$ (A) · $34 + 2 \times 9 = 52$ (O) · $16 + 3 \times 6 = 34$ (E) · $2 + 3 \times 2 = 8$ (W) · $9 \times 8 - 8 = 64$ (T) · $26 + 4 \times 3 = 38$ (R) · $6 \times 6 - 5 = 31$ (S) · $6 \times 11 - 9 = 57$ (I) · $6 + 3 \times 2 = 12$ (B) · $9 \times 9 - 7 = 74$ (C) · $8 \times 12 - 28 = 68$ (D) · $6 \times 11 - 10 = 56$ (F) · $40 + 4 \times 8 = 72$ (H) · $8 \times 10 - 13 = 67$ (U) · $9 \times 8 - 10 = 62$ (N) · $4 \times 11 - 30 = 14$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Grian

$55 \div 5 = 11$ · $12 \div 3 = 4$ · $12 \div 6 = 2$ · $60 \div 6 = 10$ · $24 \div 2 = 12$ · $6 \div 6 = 1$ · $72 \div 8 = 9$ · $10 \div 2 = 5$ · $48 \div 8 = 6$ · $30 \div 10 = 3$ · $88 \div 11 = 8$