



The Lava Grief Mystery

Grade 7 math · Place value, Multiplication, Rounding, Skip counting, Division · Reading level grades 3-4

Detective: _____ Date: _____

A sneaky griever poured lava all over the grand spawn castle! The Server Admin needs your help to decode the clues, track down the culprit, and save the server backup files.

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	ACTIVE MOD	SPAWNED PET	ACTIVE HAND	SHELMET COLOR	FEAR
Ranboo	Fly Toggle	Tamed Wolf	Right Handed	Red Shelmet	Raw Fish
Joel	TNT Launcher	Blue Parrot	Right Handed	Blue Shelmet	Splash Water
Docm77	Fly Toggle	Red Axolotl	Left Handed	Green Shelmet	Splash Water
Mumbo	Insta-Mine	Tamed Wolf	Left Handed	Red Shelmet	Raw Fish
Hermit	TNT Launcher	Baby Zombie	Left Handed	Green Shelmet	Raw Fish
Grian	Creative Mode	Red Axolotl	Left Handed	Blue Shelmet	Milk Bucket
CaptainSparklez	Insta-Mine	Iron Golem	Left Handed	Red Shelmet	Raw Fish
Techno	Insta-Mine	Blue Parrot	Left Handed	Green Shelmet	Raw Fish
Tubbo	Insta-Mine	Red Axolotl	Left Handed	Red Shelmet	Milk Bucket
Sparky	Creative Mode	Baby Zombie	Left Handed	Green Shelmet	Milk Bucket
Dream	Speed Hack	Baby Zombie	Left Handed	Red Shelmet	Raw Fish
Lizzie	Creative Mode	Red Axolotl	Right Handed	Green Shelmet	Raw Fish
DanTDM	Speed Hack	Iron Golem	Left Handed	Red Shelmet	Splash Water
Stampy	Creative Mode	Red Axolotl	Left Handed	Red Shelmet	Milk Bucket
BadBoyHalo	TNT Launcher	Iron Golem	Left Handed	Green Shelmet	Milk Bucket
George	Speed Hack	Blue Parrot	Left Handed	Red Shelmet	Raw Fish
Steve	Speed Hack	Baby Zombie	Right Handed	Blue Shelmet	Milk Bucket
Etho	Insta-Mine	Baby Zombie	Left Handed	Red Shelmet	Raw Fish
Sapnap	TNT Launcher	Tamed Wolf	Right Handed	Red Shelmet	Milk Bucket
Skeppy	Speed Hack	Red Axolotl	Right Handed	Blue Shelmet	Splash Water
AntFrost	Creative Mode	Iron Golem	Right Handed	Red Shelmet	Splash Water

CLUE 1

We found a coordinate code on a signpost, but the numbers are scrambled by place value. If we group the tens and ones correctly, we can unlock the first clue!

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

80 3000 600 300 1000 800 800 7000 1000 40 900 60 600 9000 40 60 80

9000 500 7000 30 40 7000 40 1000 700 60 40 70 60 800 600 6000

What is the value of the 8 in 21,682?

A diagram illustrating a transition. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box is a rounded rectangle with a thick border and contains the capital letter 'T' in the center.

What is the value of the 3 in 21,930?

A diagram illustrating a transition. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box is identical in shape but contains the lowercase letter 'w' in a bold, black font.

What is the value of the 8 in 62,802?

A diagram illustrating a transition. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box is a rounded rectangle with a thick black border and contains the letter 'L' in a bold, black, sans-serif font.

What is the value of the 9 in 479,780?

? → **S**

What is the value of the 9 in 544,954?

? → **D**

What is the value of the 7 in 181,743?

3? → **R**

What is the value of the 4 in 32,045?

A diagram showing a transformation. On the left is a simple rectangular box. An arrow points from this box to another box on the right. The box on the right contains the letter 'N'.

What is the value of the 6 in 56,390?

A diagram showing a box with an arrow pointing to a box labeled M.

What is the value of the 6 in 59,643?

A diagram showing a box with an arrow pointing to a box containing the letter E.

What is the value of the 7 in 434,974?

? → **G**

What is the value of the 3 in 64,319?

What is the value of the 7 in 47,450?

A diagram showing a transition from an empty box to a box containing the letter A. The first box is empty, followed by a right-pointing arrow, and then a box containing the letter 'A'.

What is the value of the 3 in 463,927?

? → **H**

What is the value of the 6 in 59,760?

? →

What is the value of the 1 in 21,600?

A diagram showing a transition from an empty box to a box containing the letter 'I'. The first box is empty, followed by a right-pointing arrow, and then a second box containing the letter 'I'.

What is the value of the 5 in 40,504?

A diagram showing a transition from an empty box to a box containing the letter P. The first box is empty, followed by a right-pointing arrow, and then a second box containing the letter 'P'.

Scratch space:

CLUE 2

Multiplication facts (1-12)

The griefer left stacks of blocks in a neat grid pattern. Multiplying the rows and columns of redstone torches will reveal where they went next.

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

T																
49	24	22	4	72	22	45	77	121	12	8	54	22	15	22	8	
								T		T					T	
4	25	54	72	12	4	25	54	49	24	49	24	22	63	22	15	49
24	45	72	42													

$7 \times 7 = \square \rightarrow \boxed{\text{T}}$

$5 \times 9 = \square \rightarrow \boxed{\text{A}}$

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

$5 \times 3 = \square \rightarrow \boxed{\text{F}}$

$11 \times 7 = \square \rightarrow \boxed{\text{K}}$

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

$12 \times 2 = \square \rightarrow \boxed{\text{H}}$

$2 \times 4 = \square \rightarrow \boxed{\text{R}}$

$2 \times 6 = \square \rightarrow \boxed{\text{G}}$

$7 \times 9 = \square \rightarrow \boxed{\text{L}}$

$2 \times 2 = \square \rightarrow \boxed{\text{S}}$

$11 \times 11 = \square \rightarrow \boxed{\text{Y}}$

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

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

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

Scratch space:

CLUE 3 Rounding

A nearby compass is spinning wildly, only giving us approximate, rounded numbers. Rounding the signals to the nearest ten helps us steady the needle.

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

Y															
200	290	130	3000	2000	370	900	110	290	70	110	9000	170			
30	3700	1700	1700	2000	3700	370	1300	3700	110	9000	2000	300	2000	1300	4300

Round 215 to the nearest hundred → **Y**

Round 3,221 to the nearest thousand → **C**

Round 8,940 to the nearest thousand → **H**

Round 174 to the nearest ten → **E**

Round 858 to the nearest hundred → **S**

Round 325 to the nearest hundred → **R**

Round 369 to the nearest ten → **N**

Round 1,261 to the nearest hundred → **W**

Round 4,275 to the nearest hundred → **F**

Round 293 to the nearest ten → **O**

Round 1,696 to the nearest hundred → **L**

Round 2,043 to the nearest thousand → **A**

Round 3,710 to the nearest hundred → **I**

Round 31 to the nearest ten → **V**

Round 74 to the nearest ten → **P**

Round 106 to the nearest ten → **T**

Round 132 to the nearest ten → **U**

Scratch space:

CLUE 4 Skip counting

To climb up the stone tower, we must jump on specific blocks. Counting by fives along the pressure plates lets us reach the top safely.

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

T																	
15	12	25	6	10	140	140	55	10	33	22	35	130	9	9	25	22	55

							T							
35	25	22	16	12	25	140	21	25	15	9	10	25	120	25

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 → **T**

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

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

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **C**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 → **H**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **M**

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

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

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

Scratch space:

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

We recovered a chest of stolen diamonds. Sharing them equally among the villagers will make them happy enough to point out 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:

$50 \div 5 = \boxed{}$

$30 \div 6 = \boxed{}$

$6 \div 6 = \boxed{}$

$9 \div 3 = \boxed{}$

$4 \div 2 = \boxed{}$

$60 \div 5 = \boxed{}$

$72 \div 9 = \boxed{}$

$36 \div 6 = \boxed{}$

$132 \div 12 = \boxed{}$

$63 \div 7 = \boxed{}$

$28 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain uses speed hacks to run fast, then lets a blue parrot sit on their shoulder.
2. The villain insta-mines a deep dark tunnel, then carries a red axolotl in a bucket.
3. The villain uses speed hacks to run fast, then orders an iron golem to attack.
4. The villain uses speed hacks to run fast, then rides a baby zombie through doors.
5. The villain insta-mines a deep dark tunnel, then rides a baby zombie through doors.
6. The villain launches tnt at the village, then rides a baby zombie through doors.
7. The villain launches tnt at the village, then summons a tamed wolf to help.
8. The villain insta-mines a deep dark tunnel, then orders an iron golem to attack.
9. The villain uses creative mode to break bedrock, then lets a blue parrot sit on their shoulder.
10. The villain insta-mines a deep dark tunnel, then summons a tamed wolf to help.
11. The villain insta-mines a deep dark tunnel, then lets a blue parrot sit on their shoulder.
12. The villain uses creative mode to break bedrock, then rides a baby zombie through doors.

Answer Key

The Lava Grief Mystery

Culprit: Dream

Speed Hack · Baby Zombie · Left Handed · Red Shelmet · Raw Fish

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT SPAWN AN IRON GOLEM"

What is the value of the 8 in 21,682? = 80 (T) · What is the value of the 3 in 21,930? = 30 (W) · What is the value of the 8 in 62,802? = 800 (L) · What is the value of the 9 in 479,780? = 9000 (S) · What is the value of the 9 in 544,954? = 900 (D) · What is the value of the 7 in 181,743? = 700 (R) · What is the value of the 4 in 32,045? = 40 (N) · What is the value of the 6 in 56,390? = 6000 (M) · What is the value of the 6 in 59,643? = 600 (E) · What is the value of the 7 in 434,974? = 70 (G) · What is the value of the 3 in 64,319? = 300 (V) · What is the value of the 7 in 47,450? = 7000 (A) · What is the value of the 3 in 463,927? = 3000 (H) · What is the value of the 6 in 59,760? = 60 (O) · What is the value of the 1 in 21,600? = 1000 (I) · What is the value of the 5 in 40,504? = 500 (P)

Clue 2 (Multiplication facts (1-12)): "THE SNEAKY GRIEFER SWINGS WITH THE LEFT HAND"

$7 \times 7 = 49$ (T) · $5 \times 9 = 45$ (A) · $5 \times 5 = 25$ (W) · $5 \times 3 = 15$ (F) · $11 \times 7 = 77$ (K) · $6 \times 9 = 54$ (I) · $12 \times 2 = 24$ (H) · $2 \times 4 = 8$ (R) · $2 \times 6 = 12$ (G) · $7 \times 9 = 63$ (L) · $2 \times 2 = 4$ (S) · $11 \times 11 = 121$ (Y) · $6 \times 7 = 42$ (D) · $11 \times 2 = 22$ (E) · $8 \times 9 = 72$ (N)

Clue 3 (Rounding): "YOU CAN STOP THE VILLAIN WITH A RAW FISH"

Round 215 to the nearest hundred = 200 (Y) · Round 3,221 to the nearest thousand = 3000 (C) · Round 8,940 to the nearest thousand = 9000 (H) · Round 174 to the nearest ten = 170 (E) · Round 858 to the nearest hundred = 900 (S) · Round 325 to the nearest hundred = 300 (R) · Round 369 to the nearest ten = 370 (N) · Round 1,261 to the nearest hundred = 1300 (W) · Round 4,275 to the nearest hundred = 4300 (F) · Round 293 to the nearest ten = 290 (O) · Round 1,696 to the nearest hundred = 1700 (L) · Round 2,043 to the nearest thousand = 2000 (A) · Round 3,710 to the nearest hundred = 3700 (I) · Round 31 to the nearest ten = 30 (V) · Round 74 to the nearest ten = 70 (P) · Round 106 to the nearest ten = 110 (T) · Round 132 to the nearest ten = 130 (U)

Clue 4 (Skip counting): "THE VILLAIN DROPPED A RED SHELMEET PIECE"

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

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Dream

$50 \div 5 = 10$ · $30 \div 6 = 5$ · $6 \div 6 = 1$ · $9 \div 3 = 3$ · $4 \div 2 = 2$ · $60 \div 5 = 12$ · $72 \div 9 = 8$ · $36 \div 6 = 6$ · $132 \div 12 = 11$ · $63 \div 7 = 9$ · $28 \div 4 = 7$