



The Purge of Pizza Dome

Grade 5 math · Place value, Multiplication, Rounding, Skip counting, Division · Reading level grades 5-6

Detective: _____ Date: _____

Oh no! A Scary Minion has snuck into the Safe House and locked Uncle Pete in the basement! To get him out, we need to track down the culprit using clues left behind in the workout room before the waves of bad guys arrive.

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 Scary Minion is _____

Possible suspects

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

NAME	GYM CLASS ROLE	LOBBY ITEM	BAT SWING STYLE	AVATAR HAIR	SPECIAL COUNTER
Chloe	Speed Level 5	Speedy Treadmill	Right-handed swing	Blue Headband Hair	Slippery Pizza
Sophia	Defense Level 5	Energy Drink	Left-handed swing	Spiky Black Hair	Slippery Pizza
Ethan	Healer Level 5	Energy Drink	Right-handed swing	Spiky Black Hair	Toy Bat swing
Mia	Speed Level 5	Golden Apple	Right-handed swing	Blue Headband Hair	Slippery Pizza
Uncle Pete	Agility Level 5	Golden Apple	Left-handed swing	Red Cap Hair	Toy Bat swing
Lucas	Agility Level 5	Heavy Dumbbell	Left-handed swing	Blue Headband Hair	Slippery Pizza
Mason	Strength Level 5	Protein Shake	Right-handed swing	Blue Headband Hair	Teddy Bear distraction
Twitch	Healer Level 5	Heavy Dumbbell	Right-handed swing	Blue Headband Hair	Slippery Pizza
Zoe	Agility Level 5	Protein Shake	Left-handed swing	Blue Headband Hair	Teddy Bear distraction
Scary Larry	Strength Level 5	Golden Apple	Left-handed swing	Spiky Black Hair	Teddy Bear distraction
Devon	Agility Level 5	Protein Shake	Left-handed swing	Blue Headband Hair	Slippery Pizza
Caleb	Speed Level 5	Energy Drink	Right-handed swing	Spiky Black Hair	Slippery Pizza
Bree	Agility Level 5	Heavy Dumbbell	Left-handed swing	Spiky Black Hair	Toy Bat swing
Bradley	Healer Level 5	Speedy Treadmill	Left-handed swing	Blue Headband Hair	Slippery Pizza
Nathan	Strength Level 5	Protein Shake	Right-handed swing	Red Cap Hair	Toy Bat swing
Leo	Speed Level 5	Energy Drink	Left-handed swing	Blue Headband Hair	Toy Bat swing
Lily	Healer Level 5	Protein Shake	Right-handed swing	Blue Headband Hair	Slippery Pizza
Sienna	Defense Level 5	Heavy Dumbbell	Right-handed swing	Spiky Black Hair	Toy Bat swing
Maya	Defense Level 5	Energy Drink	Right-handed swing	Blue Headband Hair	Slippery Pizza
Austin	Healer Level 5	Heavy Dumbbell	Left-handed swing	Red Cap Hair	Teddy Bear distraction
Scary Mary	Defense Level 5	Golden Apple	Right-handed swing	Spiky Black Hair	Teddy Bear distraction

CLUE 1 Place value

We found a digital locker code dropped by the gym stairs. Solving the place value positions reveals the first secret profile detail.

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

800 500 70 400 30 900 900 300 30 90 6000 200 70 5000 90 200 800

3000 5000 70 800 500 70 5000 100 70 70 6000 40

800 10 70 300 6000 4000 30 900 900

What is the value of the 8 in 99,811?

A diagram illustrating a transition. On the left is an empty rounded rectangle. An arrow points to the right, where there is a rounded rectangle containing the letter 'T'.

What is the value of the 6 in 16,980?

A diagram showing a transformation. On the left is a simple rectangular box. An arrow points from this box to another rectangular box on the right. This second box contains the letter 'D' in a bold, black font.

What is the value of the 3 in 79,932?

A diagram illustrating a transformation. On the left is an empty rounded rectangle. An arrow points to the right, where a rounded rectangle contains the letter 'I'.

What is the value of the 3 in 63,951?

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

What is the value of the 9 in 557,967?

?  → 

What is the value of the 4 in 866,428?

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 has a thick border and contains the lowercase letter 'v' in the center.

What is the value of the 4 in 77,948?

A diagram illustrating a transformation. On the left is a simple rectangular box. An arrow points from this box to another rectangular box on the right. This second box contains the letter 'Y' in a bold, sans-serif font.

What is the value of the 5 in 725,606?

A diagram illustrating a transformation. On the left is a simple rectangular box. An arrow points from this box to another rectangular box on the right. This second box has a thick border and contains the letter 'S' in a bold, sans-serif font.

What is the value of the 9 in 664,297?

? → **N**

What is the value of the 7 in 81,275?

What is the value of the 2 in 98,255?

A diagram illustrating a transformation. On the left is a rounded rectangle containing a question mark. An arrow points to the right, where another rounded rectangle contains the letter 'O'.

What is the value of the 3 in 486,355?

Diagram illustrating a transformation or mapping from an empty box to a box labeled **A**.

What is the value of the 1 in 35,515?

What is the value of the 1 in 998,190?

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

What is the value of the 5 in 408,584?

? → **H**

What is the value of the 4 in 834,895?

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

Scratch space:

CLUE 3 Rounding

Our base radar is scanning the dark forest outside. Rounding the distance of the approaching shadows gives us the third clue.

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

T																	T
50	4300	130	1100	430	130	170	700	200	300	170	430	9000	1300	4300	430	50	
170	700	200	1700	130	430	1100	1700	4300	130	130	170	130	300	200	5000	5000	1300

Round 53 to the nearest ten → **T**

Round 1,338 to the nearest hundred → **A**

Round 1,666 to the nearest hundred → **C**

Round 134 to the nearest ten → **E**

Round 349 to the nearest hundred → **P**

Round 1,069 to the nearest hundred → **F**

Round 732 to the nearest hundred → **L**

Round 170 to the nearest hundred → **I**

Round 429 to the nearest ten → **O**

Round 4,298 to the nearest hundred → **H**

Round 173 to the nearest ten → **S**

Round 9,432 to the nearest thousand → **N**

Round 4,920 to the nearest thousand → **Z**

Scratch space:

CLUE 4 Skip counting

Someone left a trail of spilled energy drinks across the basketball court. Counting by skips of five helps us track their steps.

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

A							A			A				A		
35	65	27	45	21	25	21	35	6	65	35	40	6	25	35	120	22
						A										
140	120	21	20	21	33	35	39	36	26	45	40	6	120	40	39	120
																21

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **O**

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **S**

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

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

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

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

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

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **C**

Scratch space:

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

We need to divide our healing potions equally among the players. Sharing them out fairly uncovers the final piece of the mystery.

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:

$120 \div 10 = \boxed{}$

$33 \div 3 = \boxed{}$

$2 \div 2 = \boxed{}$

$77 \div 11 = \boxed{}$

$6 \div 2 = \boxed{}$

$2 \div 1 = \boxed{}$

$12 \div 2 = \boxed{}$

$24 \div 6 = \boxed{}$

$5 \div 1 = \boxed{}$

$72 \div 9 = \boxed{}$

$45 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain heals allies with Healer Level 5, then drops a Heavy Dumbbell.
2. The villain flexes muscles with Strength Level 5, then drops a Heavy Dumbbell.
3. The villain flexes muscles with Strength Level 5, then chugs a fizzy Energy Drink.
4. The villain flexes muscles with Strength Level 5, then runs on the Speedy Treadmill.
5. The villain blocks attacks with Defense Level 5, then drinks a cold Protein Shake.
6. The villain heals allies with Healer Level 5, then munching a shiny Golden Apple.
7. The villain blocks attacks with Defense Level 5, then drops a Heavy Dumbbell.
8. The villain dodges traps with Agility Level 5, then munching a shiny Golden Apple.
9. The villain heals allies with Healer Level 5, then runs on the Speedy Treadmill.
10. The villain heals allies with Healer Level 5, then drinks a cold Protein Shake.
11. The villain sprints away with Speed Level 5, then munching a shiny Golden Apple.
12. The villain blocks attacks with Defense Level 5, then chugs a fizzy Energy Drink.

Answer Key

The Purge of Pizza Dome

Culprit: Lily

Healer Level 5 · Protein Shake · Right-handed swing · Blue Headband Hair · Slippery Pizza

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE THE SPEEDY TREADMILL"

What is the value of the 8 in 99,811? = 800 (T) · What is the value of the 6 in 16,980? = 6000 (D) · What is the value of the 3 in 79,932? = 30 (I) · What is the value of the 3 in 63,951? = 3000 (U) · What is the value of the 9 in 557,967? = 900 (L) · What is the value of the 4 in 866,428? = 400 (V) · What is the value of the 4 in 77,948? = 40 (Y) · What is the value of the 5 in 725,606? = 5000 (S) · What is the value of the 9 in 664,297? = 90 (N) · What is the value of the 7 in 81,275? = 70 (E) · What is the value of the 2 in 98,255? = 200 (O) · What is the value of the 3 in 486,355? = 300 (A) · What is the value of the 1 in 35,515? = 10 (R) · What is the value of the 1 in 998,190? = 100 (P) · What is the value of the 5 in 408,584? = 500 (H) · What is the value of the 4 in 834,895? = 4000 (M)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT SWINGS THE BAT WITH THE RIGHT HAND"

$10 \times 7 = 70$ (T) · $5 \times 10 = 50$ (S) · $9 \times 10 = 90$ (W) · $4 \times 8 = 32$ (U) · $2 \times 1 = 2$ (B) · $5 \times 1 = 5$ (A) · $3 \times 12 = 36$ (C) · $1 \times 1 = 1$ (G) · $7 \times 6 = 42$ (E) · $5 \times 11 = 55$ (I) · $3 \times 11 = 33$ (N) · $9 \times 11 = 99$ (D) · $7 \times 5 = 35$ (H) · $10 \times 10 = 100$ (P) · $9 \times 12 = 108$ (R)

Clue 3 (Rounding): "THE FOE SLIPS ON A HOT SLICE OF CHEESE PIZZA"

Round 53 to the nearest ten = 50 (T) · Round 1,338 to the nearest hundred = 1300 (A) · Round 1,666 to the nearest hundred = 1700 (C) · Round 134 to the nearest ten = 130 (E) · Round 349 to the nearest hundred = 300 (P) · Round 1,069 to the nearest hundred = 1100 (F) · Round 732 to the nearest hundred = 700 (L) · Round 170 to the nearest hundred = 200 (I) · Round 429 to the nearest ten = 430 (O) · Round 4,298 to the nearest hundred = 4300 (H) · Round 173 to the nearest ten = 170 (S) · Round 9,432 to the nearest thousand = 9000 (N) · Round 4,920 to the nearest thousand = 5000 (Z)

Clue 4 (Skip counting): "A BLUE HEADBAND HAIR PIECE WAS FOUND INSIDE"

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

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Lily

$120 \div 10 = 12$ · $33 \div 3 = 11$ · $2 \div 2 = 1$ · $77 \div 11 = 7$ · $6 \div 2 = 3$ · $2 \div 1 = 2$ · $12 \div 2 = 6$ · $24 \div 6 = 4$ · $5 \div 1 = 5$ · $72 \div 9 = 8$ · $45 \div 5 = 9$