



The Great Space Pizza Heist

Grade 4 math · Multiplication, Multi-step word problems, Rounding, Addition, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Ahoy, space cadet! A sneaky Space Cat Pirate has boarded our ship and stolen the legendary Mega Cheese Pizza! The crew is hungry and panicking. We must track down the culprit before they devour the ultimate slice. Use your math skills to scan the galaxy, gather clues, and find the pirate cat behind this cheesy crime!

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 Pirate Captain Cat is _____

Possible suspects

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

NAME	PIRATE WEAPON	ALIEN GADGET	ACTIVE PAW	FUR COLOR	DISTRACTION
Luna	cheese blaster	space jetpack	left-pawed	alien green	laser pointer
Sir Purrsalot	laser cutlass	space jetpack	right-pawed	midnight black	laser pointer
Pegleg Percy	yarn launcher	gravity boots	left-pawed	orange stripes	squeaky toy
Captain Barnaby	cheese blaster	cloaking device	right-pawed	orange stripes	catnip mouse
Admiral Scratch	gravity anchor	cloaking device	left-pawed	alien green	catnip mouse
Felix	tuna torpedo	gravity boots	left-pawed	orange stripes	catnip mouse
Waffles	cheese blaster	space jetpack	right-pawed	midnight black	laser pointer
Cosmo	tuna torpedo	shrink ray	right-pawed	orange stripes	laser pointer
Starlight	tuna torpedo	teleport belt	left-pawed	orange stripes	catnip mouse
Shadow	gravity anchor	space jetpack	right-pawed	midnight black	laser pointer
Gizmo	gravity anchor	gravity boots	right-pawed	midnight black	squeaky toy
Captain Fluff	tuna torpedo	shrink ray	right-pawed	midnight black	laser pointer
Spitfire	cheese blaster	gravity boots	left-pawed	orange stripes	squeaky toy
Scurvy	tuna torpedo	space jetpack	right-pawed	midnight black	laser pointer
Nebula	gravity anchor	space jetpack	right-pawed	orange stripes	laser pointer
Boots	tuna torpedo	space jetpack	left-pawed	midnight black	catnip mouse
Barnacle Bob	laser cutlass	space jetpack	left-pawed	midnight black	laser pointer
Patch	tuna torpedo	teleport belt	right-pawed	orange stripes	squeaky toy
Captain Cheddar	cheese blaster	space jetpack	right-pawed	midnight black	catnip mouse
Salty Sam	tuna torpedo	shrink ray	left-pawed	alien green	squeaky toy
Clawde	yarn launcher	shrink ray	left-pawed	orange stripes	catnip mouse

Multiplication facts (1-12)

The spaceship kitchen has boxes of cheese stored in neat rows. Multiply the rows to find the total cheese block count and unlock the first scanner.

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

9 2 64 50 110 27 84 9 64 22 21 64 33 54 21 9 45 33 64

84 33 2 27 110 54 32 27 84 6

$9 \times 1 = \boxed{} \rightarrow \boxed{\text{T}}$

$9 \times 5 = \boxed{} \rightarrow \boxed{\text{U}}$

$8 \times 8 = \boxed{} \rightarrow \boxed{\text{E}}$

$2 \times 11 = \boxed{} \rightarrow \boxed{\text{D}}$

$$4 \times 8 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$9 \times 6 = \boxed{} \rightarrow \boxed{\text{N}}$$

$7 \times 12 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$10 \times 5 = \boxed{} \rightarrow \boxed{\text{P}}$

$7 \times 3 = \boxed{} \rightarrow \boxed{0}$

$10 \times 11 = \boxed{} \rightarrow \boxed{1}$

$3 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{S}}$

$3 \times 9 = \boxed{} \rightarrow \boxed{\text{R}}$

$2 \times 1 = \boxed{} \rightarrow \boxed{\text{H}}$

$3 \times 2 = \boxed{} \rightarrow \boxed{\text{Y}}$

Scratch space:

CLUE 2

Multi-step word problems

We need to pack our astronaut backpacks with gear. Do the multi-step math to find out how many heavy energy drinks we can carry.

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

A witness saw the villain was R W E D .

85 50 28 42 13 84 87

Officer Whiskers collected 161 laser battery in the morning and 349 laser battery in the afternoon, then split them equally among 6 The Galactic Feline Force. How many laser battery did each get?

Answer: → R

There were 257 pizza slice in all. 1 The Galactic Feline Force used 5 pizza slice each. The other 6 The Galactic Feline Force shared the rest equally. How many pizza slice did each of the other The Galactic Feline Force get?

Answer: → H

There were 278 laser battery in all. 26 laser battery were set aside. The rest were shared equally among 9 The Galactic Feline Force. How many laser battery did each get?

Answer: → G

There were 144 laser battery in all. 2 The Galactic Feline Force used 33 laser battery each. The other 6 The Galactic Feline Force shared the rest equally. How many laser battery did each of the other The Galactic Feline Force get?

Answer: → T

There were 872 laser battery in all. 32 laser battery were set aside. The rest were shared equally among 10 The Galactic Feline Force. How many laser battery did each get?

Answer: → P

There were 420 anchovy in all. 20 anchovy were set aside. The rest were shared equally among 8 The Galactic Feline Force. How many anchovy did each get?

Answer: → I

There were 638 space mouse in all. 29 space mouse were set aside. The rest were shared equally among 7 The Galactic Feline Force. How many space mouse did each get?

Answer: → A

Scratch space:

CLUE 3 Rounding

Our alien radar system is glitching and only shows rounded numbers. Round the distance to the nearest ten to pinpoint the thief's escape pod.

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

T																			
4300	370	130	2300	9000	1100	1100	50	9000	300	2900	50	300	50	3700	4300	130	2900	50	

2900	130	70	1100	50	230	130	2900	70	90	4300									

Round 4,253 to the nearest hundred → **T**

Round 1,134 to the nearest hundred → **L**

Round 2,251 to the nearest hundred → **V**

Round 3,700 to the nearest hundred → **F**

Round 228 to the nearest ten → **S**

Round 373 to the nearest ten → **H**

Round 54 to the nearest ten → **A**

Round 2,943 to the nearest hundred → **R**

Round 126 to the nearest ten → **E**

Round 9,062 to the nearest thousand → **I**

Round 294 to the nearest hundred → **N**

Round 70 to the nearest ten → **D**

Round 90 to the nearest ten → **O**

Scratch space:

CLUE 4 Addition

Let's count all the stolen pepperoni slices left on the metal deck. Add them up to see which direction the cat ran.

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

B																	
8717	3927	3328	6357	2240	2707	3309	2344	2733	3328	3479	2707	9891	3309	2641	2170	9644	2641

4911	2132	6123	3479	3328	3309	6357

$4393 + 4324 = \square \rightarrow \mathbf{B}$	$3849 + 2274 = \square \rightarrow \mathbf{E}$	$2162 + 1166 = \square \rightarrow \mathbf{A}$
$983 + 1724 = \square \rightarrow \mathbf{F}$	$2085 + 4272 = \square \rightarrow \mathbf{C}$	$1501 + 739 = \square \rightarrow \mathbf{K}$
$1478 + 1163 = \square \rightarrow \mathbf{N}$	$2574 + 1353 = \square \rightarrow \mathbf{L}$	$1322 + 2157 = \square \rightarrow \mathbf{S}$
$1309 + 861 = \square \rightarrow \mathbf{D}$	$5017 + 4874 = \square \rightarrow \mathbf{O}$	$1332 + 1012 = \square \rightarrow \mathbf{R}$
$1238 + 894 = \square \rightarrow \mathbf{H}$	$4184 + 5460 = \square \rightarrow \mathbf{I}$	$1543 + 3368 = \square \rightarrow \mathbf{T}$
$2277 + 1032 = \square \rightarrow \mathbf{U}$	$976 + 1757 = \square \rightarrow \mathbf{W}$	

Scratch space:

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

The hungry space cadets need to share the leftover garlic knots. Divide them equally to unlock the final security door.

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:

$56 \div 8 = \boxed{}$

$1 \div 1 = \boxed{}$

$40 \div 8 = \boxed{}$

$8 \div 1 = \boxed{}$

$30 \div 10 = \boxed{}$

$33 \div 3 = \boxed{}$

$2 \div 1 = \boxed{}$

$12 \div 3 = \boxed{}$

$18 \div 2 = \boxed{}$

$30 \div 3 = \boxed{}$

$72 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain launched a smelly tuna torpedo, then zoomed away on a space jetpack.
2. The villain fired a sticky cheese blaster, then stomped off in heavy gravity boots.
3. The villain dropped a heavy gravity anchor, then shrank to escape with a shrink ray.
4. The villain fired a sticky cheese blaster, then shrank to escape with a shrink ray.
5. The villain fired a sticky cheese blaster, then zoomed away on a space jetpack.
6. The villain swung a glowing laser cutlass, then zoomed away on a space jetpack.
7. The villain dropped a heavy gravity anchor, then zoomed away on a space jetpack.
8. The villain shot a tangled yarn launcher, then shrank to escape with a shrink ray.
9. The villain launched a smelly tuna torpedo, then stomped off in heavy gravity boots.
10. The villain dropped a heavy gravity anchor, then stomped off in heavy gravity boots.
11. The villain fired a sticky cheese blaster, then vanished using a stealth cloaking device.
12. The villain dropped a heavy gravity anchor, then vanished using a stealth cloaking device.

Answer Key

The Great Space Pizza Heist

Culprit: Sir Purrsalot

laser cutlass · space jetpack · right-pawed · midnight black · laser pointer

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE PIRATE DOES NOT USE A SHRINK RAY"

$9 \times 1 = 9$ (T) · $9 \times 5 = 45$ (U) · $8 \times 8 = 64$ (E) · $2 \times 11 = 22$ (D) · $4 \times 8 = 32$ (K) · $9 \times 6 = 54$ (N) · $7 \times 12 = 84$ (A) · $10 \times 5 = 50$ (P) · $7 \times 3 = 21$ (O) · $10 \times 11 = 110$ (I) · $3 \times 11 = 33$ (S) · $3 \times 9 = 27$ (R) · $2 \times 1 = 2$ (H) · $3 \times 2 = 6$ (Y)

Clue 2 (Multi-step word problems): "RIGHT PAWED"

Officer Whiskers collected 161 laser battery in the morning and 349 laser battery in the afternoon, then split them equally among 6 The Galactic Feline Force. How many laser battery did each get? = 85 (R) · There were 257 pizza slice in all. 1 The Galactic Feline Force used 5 pizza slice each. The other 6 The Galactic Feline Force shared the rest equally. How many pizza slice did each of the other The Galactic Feline Force get? = 42 (H) · There were 278 laser battery in all. 26 laser battery were set aside. The rest were shared equally among 9 The Galactic Feline Force. How many laser battery did each get? = 28 (G) · There were 144 laser battery in all. 2 The Galactic Feline Force used 33 laser battery each. The other 6 The Galactic Feline Force shared the rest equally. How many laser battery did each of the other The Galactic Feline Force get? = 13 (T) · There were 872 laser battery in all. 32 laser battery were set aside. The rest were shared equally among 10 The Galactic Feline Force. How many laser battery did each get? = 84 (P) · There were 420 anchovy in all. 20 anchovy were set aside. The rest were shared equally among 8 The Galactic Feline Force. How many anchovy did each get? = 50 (I) · There were 638 space mouse in all. 29 space mouse were set aside. The rest were shared equally among 7 The Galactic Feline Force. How many space mouse did each get? = 87 (A)

Clue 3 (Rounding): "THE VILLAIN RAN AFTER A RED LASER DOT"

Round 4,253 to the nearest hundred = 4300 (T) · Round 1,134 to the nearest hundred = 1100 (L) · Round 2,251 to the nearest hundred = 2300 (V) · Round 3,700 to the nearest hundred = 3700 (F) · Round 228 to the nearest ten = 230 (S) · Round 373 to the nearest ten = 370 (H) · Round 54 to the nearest ten = 50 (A) · Round 2,943 to the nearest hundred = 2900 (R) · Round 126 to the nearest ten = 130 (E) · Round 9,062 to the nearest thousand = 9000 (I) · Round 294 to the nearest hundred = 300 (N) · Round 70 to the nearest ten = 70 (D) · Round 90 to the nearest ten = 90 (O)

Clue 4 (Addition): "BLACK FUR WAS FOUND IN THE SAUCE"

$4393 + 4324 = 8717$ (B) · $3849 + 2274 = 6123$ (E) · $2162 + 1166 = 3328$ (A) · $983 + 1724 = 2707$ (F) · $2085 + 4272 = 6357$ (C) · $1501 + 739 = 2240$ (K) · $1478 + 1163 = 2641$ (N) · $2574 + 1353 = 3927$ (L) · $1322 + 2157 = 3479$ (S) · $1309 + 861 = 2170$ (D) · $5017 + 4874 = 9891$ (O) · $1332 + 1012 = 2344$ (R) · $1238 + 894 = 2132$ (H) · $4184 + 5460 = 9644$ (I) · $1543 + 3368 = 4911$ (T) · $2277 + 1032 = 3309$ (U) · $976 + 1757 = 2733$ (W)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Sir Purrsalot

$56 \div 8 = 7$ · $1 \div 1 = 1$ · $40 \div 8 = 5$ · $8 \div 1 = 8$ · $30 \div 10 = 3$ · $33 \div 3 = 11$ · $2 \div 1 = 2$ · $12 \div 3 = 4$ · $18 \div 2 = 9$ · $30 \div 3 = 10$ · $72 \div 6 = 12$