



The Whiskertown Championship Mystery

Grade 6 math · Multiplication, Fractions of a number, Percentages, Exponents, Division · Reading level grades 5-6

Detective: _____ Date: _____

Someone scrambled the scorecards at the Annual Whiskertown Grand Cat Championship! Detective Whiskers needs your math skills to decode the clues and unmask the sneaky Phantom Prowler.

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 Phantom Prowler is _____

Possible suspects

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

NAME	SPECIAL SKILL	FAVORITE TOY	PAW PREFERENCE	FUR PATTERN	DISTRACTION
Cheshire	Stealth Dash	Squeaking Fish	Left Pawed	Tuxedo Black	Shiny Foil Ball
Penelope	High Jump	Feather Wand	Left Pawed	Calico Patches	Shiny Foil Ball
Mitten	High Jump	Feather Wand	Left Pawed	Tabby Stripes	Shiny Foil Ball
Figaro	Pounce Strike	Catnip Mouse	Left Pawed	Tuxedo Black	Cat Mint
Simba	High Jump	Laser Pointer	Left Pawed	Tabby Stripes	Shiny Foil Ball
Sylvester	Loud Purr	Yarn Ball	Left Pawed	Calico Patches	Fish Treats
Garfield	Pounce Strike	Squeaking Fish	Left Pawed	Tabby Stripes	Fish Treats
Nala	Loud Purr	Squeaking Fish	Left Pawed	Tabby Stripes	Shiny Foil Ball
Socks	High Jump	Feather Wand	Right Pawed	Tabby Stripes	Fish Treats
Gus	Wall Run	Squeaking Fish	Left Pawed	Calico Patches	Fish Treats
Whiskers	Pounce Strike	Laser Pointer	Right Pawed	Tabby Stripes	Shiny Foil Ball
Duchess	Stealth Dash	Catnip Mouse	Left Pawed	Calico Patches	Shiny Foil Ball
Luna	Stealth Dash	Catnip Mouse	Left Pawed	Tabby Stripes	Cat Mint
Berlioz	High Jump	Yarn Ball	Left Pawed	Calico Patches	Cat Mint
Shadow	High Jump	Yarn Ball	Left Pawed	Calico Patches	Fish Treats
Macavity	Pounce Strike	Squeaking Fish	Right Pawed	Calico Patches	Fish Treats
Milo	Loud Purr	Yarn Ball	Left Pawed	Tabby Stripes	Shiny Foil Ball
Cleo	Pounce Strike	Laser Pointer	Left Pawed	Tabby Stripes	Cat Mint
Felix	High Jump	Squeaking Fish	Left Pawed	Tabby Stripes	Cat Mint
Smokey	Wall Run	Feather Wand	Right Pawed	Tuxedo Black	Fish Treats
Toulouse	High Jump	Catnip Mouse	Left Pawed	Tabby Stripes	Shiny Foil Ball

CLUE 1

Multiplication facts (1-12)

To figure out how many cat treats were stolen, you multiply the number of crates by the boxes per crate.

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

T														
100	40	96	45	3	25	9	32	96	3	60	96	14	96	3

T							T									
100	25	80	88	40	96	5	100	40	96	99	144	3	60	11	144	32

$10 \times 10 = \square \rightarrow \text{T}$

$1 \times 3 = \square \rightarrow \text{R}$

$9 \times 1 = \square \rightarrow \text{W}$

$7 \times 2 = \square \rightarrow \text{V}$

$12 \times 8 = \square \rightarrow \text{E}$

$5 \times 8 = \square \rightarrow \text{H}$

$5 \times 5 = \square \rightarrow \text{O}$

$11 \times 8 = \square \rightarrow \text{C}$

$1 \times 5 = \square \rightarrow \text{D}$

$10 \times 6 = \square \rightarrow \text{N}$

$9 \times 11 = \square \rightarrow \text{Y}$

$4 \times 8 = \square \rightarrow \text{L}$

$11 \times 1 = \square \rightarrow \text{B}$

$12 \times 12 = \square \rightarrow \text{A}$

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

$9 \times 5 = \square \rightarrow \text{P}$

Scratch space:

CLUE 2
Fractions of a number

The head judge says only a fraction of the grooming stations were tampered with during the chaos.

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

T																
5	27	31	7	10	4	24	6	31	10	6	31	39	26	31	20	39
				T									T			
7	10	8	38	5	9	10	4	23	39	6	31	9	5	7	39	24

$1/3 \text{ of } 15 = \square \rightarrow \boxed{\text{T}}$

$1/5 \text{ of } 120 = \square \rightarrow \boxed{\text{W}}$

$1/3 \text{ of } 21 = \square \rightarrow \boxed{\text{P}}$

$1/4 \text{ of } 92 = \square \rightarrow \boxed{\text{M}}$

$1/3 \text{ of } 12 = \square \rightarrow \boxed{\text{O}}$

$1/6 \text{ of } 120 = \square \rightarrow \boxed{\text{S}}$

$6/8 \text{ of } 36 = \square \rightarrow \boxed{\text{H}}$

$1/2 \text{ of } 78 = \square \rightarrow \boxed{\text{A}}$

$6/8 \text{ of } 12 = \square \rightarrow \boxed{\text{F}}$

$4/6 \text{ of } 9 = \square \rightarrow \boxed{\text{L}}$

$2/5 \text{ of } 95 = \square \rightarrow \boxed{\text{N}}$

$1/3 \text{ of } 24 = \square \rightarrow \boxed{\text{I}}$

$1/10 \text{ of } 100 = \square \rightarrow \boxed{\text{R}}$

$2/6 \text{ of } 93 = \square \rightarrow \boxed{\text{E}}$

$2/8 \text{ of } 104 = \square \rightarrow \boxed{\text{V}}$

Scratch space:

CLUE 3

Percentages

Security scanned the digital tally board, which shows the percentage of votes corrupted.

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

A											A		
13	35	21	33	12	37	30	36	33	19	32	13	19	19

					A												
20	33	35	43	6	13	28	43	9	20	43	21	9	11	6	36	15	19

$5\% \text{ of } 260 = \square \rightarrow \boxed{\text{A}}$

$10\% \text{ of } 60 = \square \rightarrow \boxed{\text{R}}$

$50\% \text{ of } 74 = \square \rightarrow \boxed{\text{Y}}$

$5\% \text{ of } 640 = \square \rightarrow \boxed{\text{B}}$

$25\% \text{ of } 172 = \square \rightarrow \boxed{\text{T}}$

$20\% \text{ of } 140 = \square \rightarrow \boxed{\text{C}}$

$20\% \text{ of } 45 = \square \rightarrow \boxed{\text{E}}$

$50\% \text{ of } 40 = \square \rightarrow \boxed{\text{D}}$

$20\% \text{ of } 55 = \square \rightarrow \boxed{\text{P}}$

$20\% \text{ of } 95 = \square \rightarrow \boxed{\text{L}}$

$60\% \text{ of } 35 = \square \rightarrow \boxed{\text{H}}$

$40\% \text{ of } 90 = \square \rightarrow \boxed{\text{O}}$

$50\% \text{ of } 30 = \square \rightarrow \boxed{\text{W}}$

$25\% \text{ of } 132 = \square \rightarrow \boxed{\text{I}}$

$20\% \text{ of } 175 = \square \rightarrow \boxed{\text{S}}$

$10\% \text{ of } 120 = \square \rightarrow \boxed{\text{N}}$

$25\% \text{ of } 120 = \square \rightarrow \boxed{\text{F}}$

Scratch space:

CLUE 4

Exponents

The sound level of the cat purrs grew exponentially across each row of benches.

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

L																			
400	144	144	243	25	361	256	196	196	289	243	361	125	4	216	25	243	8	225	125

L												L				
400	4	361	361	25	125	25	324	361	36	25	8	400	144	144	125	

$20^2 = \square \rightarrow$ L	$14^2 = \square \rightarrow$ B	$12^2 = \square \rightarrow$ O	$6^3 = \square \rightarrow$ P
$2^2 = \square \rightarrow$ I	$6^2 = \square \rightarrow$ H	$3^5 = \square \rightarrow$ S	$2^8 = \square \rightarrow$ A
$17^2 = \square \rightarrow$ Y	$5^2 = \square \rightarrow$ E	$18^2 = \square \rightarrow$ D	$15^2 = \square \rightarrow$ U
$19^2 = \square \rightarrow$ T	$2^3 = \square \rightarrow$ F	$5^3 = \square \rightarrow$ R	

Scratch space:

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

To divide the remaining prize ribbons equally among the finalists, you must solve this last riddle.

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:

$40 \div 5 = \boxed{}$

$36 \div 9 = \boxed{}$

$54 \div 9 = \boxed{}$

$110 \div 10 = \boxed{}$

$2 \div 1 = \boxed{}$

$18 \div 6 = \boxed{}$

$10 \div 2 = \boxed{}$

$56 \div 8 = \boxed{}$

$4 \div 4 = \boxed{}$

$81 \div 9 = \boxed{}$

$72 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain used high jump to scale the judges booth, then dropped a squeaking fish.
2. The villain used wall run to scramble over the barrier, then shattered a laser pointer.
3. The villain used loud purr to disrupt the broadcast, then knocked over a catnip mouse.
4. The villain used high jump to scale the judges booth, then shattered a laser pointer.
5. The villain used stealth dash to slip past security, then dropped a squeaking fish.
6. The villain used loud purr to disrupt the broadcast, then dropped a squeaking fish.
7. The villain used pounce strike to snatch the prize ribbon, then dropped a squeaking fish.
8. The villain used high jump to scale the judges booth, then knocked over a catnip mouse.
9. The villain used pounce strike to snatch the prize ribbon, then knocked over a catnip mouse.
10. The villain used high jump to scale the judges booth, then swiped a feather wand.
11. The villain used loud purr to disrupt the broadcast, then entangled the stage in a yarn ball.
12. The villain used wall run to scramble over the barrier, then swiped a feather wand.

Answer Key

The Whiskertown Championship Mystery

Culprit: Mitten

High Jump · Feather Wand · Left Pawed · Tabby Stripes · Shiny Foil Ball

Trail: Start 21 → Clue 1 17 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE PROWLER NEVER TOUCHED THE YARN BALL"

$10 \times 10 = 100$ (T) · $1 \times 3 = 3$ (R) · $9 \times 1 = 9$ (W) · $7 \times 2 = 14$ (V) · $12 \times 8 = 96$ (E) · $5 \times 8 = 40$ (H) · $5 \times 5 = 25$ (O) · $11 \times 8 = 88$ (C) · $1 \times 5 = 5$ (D) · $10 \times 6 = 60$ (N) · $9 \times 11 = 99$ (Y) · $4 \times 8 = 32$ (L) · $11 \times 1 = 11$ (B) · $12 \times 12 = 144$ (A) · $8 \times 10 = 80$ (U) · $9 \times 5 = 45$ (P)

Clue 2 (Fractions of a number): "THE PROWLER LEAVES A PRINT FROM A LEFT PAW"

$\frac{1}{3}$ of 15 = 5 (T) · $\frac{1}{5}$ of 120 = 24 (W) · $\frac{1}{3}$ of 21 = 7 (P) · $\frac{1}{4}$ of 92 = 23 (M) · $\frac{1}{3}$ of 12 = 4 (O) · $\frac{1}{6}$ of 120 = 20 (S) · $\frac{6}{8}$ of 36 = 27 (H) · $\frac{1}{2}$ of 78 = 39 (A) · $\frac{6}{8}$ of 12 = 9 (F) · $\frac{4}{6}$ of 9 = 6 (L) · $\frac{2}{5}$ of 95 = 38 (N) · $\frac{1}{3}$ of 24 = 8 (I) · $\frac{1}{10}$ of 100 = 10 (R) · $\frac{2}{6}$ of 93 = 31 (E) · $\frac{2}{8}$ of 104 = 26 (V)

Clue 3 (Percentages): "A SHINY FOIL BALL DISTRACTED THE PROWLER"

5% of 260 = 13 (A) · 10% of 60 = 6 (R) · 50% of 74 = 37 (Y) · 5% of 640 = 32 (B) · 25% of 172 = 43 (T) · 20% of 140 = 28 (C) · 20% of 45 = 9 (E) · 50% of 40 = 20 (D) · 20% of 55 = 11 (P) · 20% of 95 = 19 (L) · 60% of 35 = 21 (H) · 40% of 90 = 36 (O) · 50% of 30 = 15 (W) · 25% of 132 = 33 (I) · 20% of 175 = 35 (S) · 10% of 120 = 12 (N) · 25% of 120 = 30 (F)

Clue 4 (Exponents): "LOOSE TABBY STRIPES FUR LITTERED THE FLOOR"

$20^2 = 400$ (L) · $14^2 = 196$ (B) · $12^2 = 144$ (O) · $6^3 = 216$ (P) · $2^2 = 4$ (I) · $6^2 = 36$ (H) · $3^5 = 243$ (S) · $2^8 = 256$ (A) · $17^2 = 289$ (Y) · $5^2 = 25$ (E) · $18^2 = 324$ (D) · $15^2 = 225$ (U) · $19^2 = 361$ (T) · $2^3 = 8$ (F) · $5^3 = 125$ (R)

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

$40 \div 5 = 8$ · $36 \div 9 = 4$ · $54 \div 9 = 6$ · $110 \div 10 = 11$ · $2 \div 1 = 2$ · $18 \div 6 = 3$ · $10 \div 2 = 5$ · $56 \div 8 = 7$ · $4 \div 4 = 1$ · $81 \div 9 = 9$ · $72 \div 6 = 12$