



The Halloween World Series Mystery

Grade 4 math · Place value, Addition, Subtraction, Rounding, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

During the spooky Halloween World Series, someone swapped the championship trophy with a giant jack-o-lantern! The Head Umpire needs your help to decode the clues and catch the sneaky Phantom Paw before the final inning.

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 Paw is _____

Possible suspects

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

NAME	BASEBALL MOVE	SPOOKY ITEM	BATTING STYLE	FUR COLOR	WEAKNESS
Whiskers	Fast Pitch	Ghost Beanbag	Right Handed	Calico Fur	Catnip Ball
Mike Trout	Quick Slide	Ghost Beanbag	Right Handed	Black Fur	Squeaky Toy
Paws	High Leap	Glowing Pumpkin	Right Handed	Calico Fur	Catnip Ball
Meowth	Power Swing	Witch Hat	Left Handed	Orange Fur	Squeaky Toy
Sylvester	Tail Swipe	Ghost Beanbag	Right Handed	Black Fur	Catnip Ball
Salem	Tail Swipe	Ghost Beanbag	Right Handed	Black Fur	Laser Pointer
Pumpkin	High Leap	Witch Hat	Left Handed	Calico Fur	Squeaky Toy
Ken Griffey	Quick Slide	Ghost Beanbag	Right Handed	Orange Fur	Catnip Ball
Jackie Robinson	Power Swing	Witch Hat	Right Handed	Calico Fur	Squeaky Toy
Garfield	Power Swing	Witch Hat	Left Handed	Calico Fur	Squeaky Toy
Bat Cat	High Leap	Witch Hat	Left Handed	Calico Fur	Laser Pointer
Derek Jeter	Power Swing	Spooky Bat	Left Handed	Calico Fur	Squeaky Toy
Tom Cat	Power Swing	Witch Hat	Left Handed	Calico Fur	Laser Pointer
Willy Adames	Power Swing	Flying Broom	Right Handed	Calico Fur	Catnip Ball
Babe Ruth	Tail Swipe	Spooky Bat	Left Handed	Calico Fur	Catnip Ball
Cal Ripken	Fast Pitch	Flying Broom	Left Handed	Black Fur	Squeaky Toy
Shadow	Power Swing	Ghost Beanbag	Right Handed	Orange Fur	Laser Pointer
Mookie Betts	Fast Pitch	Ghost Beanbag	Left Handed	Calico Fur	Squeaky Toy
Felix the Cat	Tail Swipe	Flying Broom	Left Handed	Orange Fur	Laser Pointer
Midnight	Fast Pitch	Witch Hat	Left Handed	Calico Fur	Squeaky Toy
Bryce Harper	Tail Swipe	Flying Broom	Right Handed	Black Fur	Squeaky Toy

CLUE 1 Place value

You examine the digitized scoreboard readout to check the place value of the digits.

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

T																			
50	2000	100	80	7000	5000	5000	800	7000	8000	200	7000	200	8000	60	50	400	4000	100	
800	4000	6000	60	60	300	900	700	800	50										

What is the value of the 5 in 356?

→

T

What is the value of the 1 in 5,177?

→

E

What is the value of the 6 in 96,745?

→

P

What is the value of the 2 in 254?

→

D

What is the value of the 8 in 5,852?

→

A

What is the value of the 8 in 9,286?

→

V

What is the value of the 9 in 955?

→

Y

What is the value of the 4 in 4,570?

→

S

What is the value of the 2 in 2,758?

→

H

What is the value of the 4 in 8,463?

→

U

What is the value of the 7 in 57,858?

→

I

What is the value of the 7 in 2,735?

→

B

What is the value of the 6 in 769?

→

O

What is the value of the 3 in 5,370?

→

K

What is the value of the 8 in 58,316?

→

N

What is the value of the 5 in 5,697?

→

L

Scratch space:

CLUE 2 Addition

To calculate the total fans in the Halloween bleachers, you add up the ticket counts.

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

A									A		A				
3325	7520	7338	7048	5736	2081	6815	6815	6815	3325	7520	3325	7098	2081	6964	7048

	A						A						
2553	3325	5736	3998	2081	3998	6754	3325	7520	6754	5165	7338	5736	7048

$1610 + 1715 = \square \rightarrow \boxed{\text{A}}$

$1654 + 2344 = \square \rightarrow \boxed{\text{D}}$

$5096 + 2424 = \square \rightarrow \boxed{\text{W}}$

$4259 + 2495 = \square \rightarrow \boxed{\text{P}}$

$4184 + 3154 = \square \rightarrow \boxed{\text{I}}$

$807 + 1746 = \square \rightarrow \boxed{\text{H}}$

$4522 + 2442 = \square \rightarrow \boxed{\text{F}}$

$2027 + 3138 = \square \rightarrow \boxed{\text{R}}$

$736 + 1345 = \square \rightarrow \boxed{\text{E}}$

$3935 + 2880 = \square \rightarrow \boxed{\text{S}}$

$3515 + 3583 = \square \rightarrow \boxed{\text{L}}$

$4028 + 3020 = \square \rightarrow \boxed{\text{T}}$

$3809 + 1927 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3
Subtraction

You subtract the stolen baseballs from the total inventory to see what remains.

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

T													T							
4096	6036	1469	1243	5095	6505	6505	3539	5095	3683	4879	3539	5187	4096	3504	5095	6814	5923	1469	4109	

										T		
4356	4601	3539	5187	8894	8587	1469	3539	5923	4601	4096	7990	4601

$6043 - 1947 = \square \rightarrow \text{[T]}$

$5101 - 1597 = \square \rightarrow \text{[R]}$

$5111 - 755 = \square \rightarrow \text{[B]}$

$9214 - 1224 = \square \rightarrow \text{[O]}$

$10855 - 4041 = \square \rightarrow \text{[C]}$

$5266 - 1727 = \square \rightarrow \text{[A]}$

$5255 - 1146 = \square \rightarrow \text{[D]}$

$9048 - 3125 = \square \rightarrow \text{[K]}$

$4017 - 334 = \square \rightarrow \text{[N]}$

$8726 - 2690 = \square \rightarrow \text{[H]}$

$9717 - 4838 = \square \rightarrow \text{[W]}$

$5829 - 4360 = \square \rightarrow \text{[E]}$

$7295 - 790 = \square \rightarrow \text{[L]}$

$9796 - 902 = \square \rightarrow \text{[Q]}$

$6941 - 1846 = \square \rightarrow \text{[I]}$

$2040 - 797 = \square \rightarrow \text{[V]}$

$8908 - 4307 = \square \rightarrow \text{[Y]}$

$6241 - 1054 = \square \rightarrow \text{[S]}$

$11202 - 2615 = \square \rightarrow \text{[U]}$

Scratch space:

CLUE 4 Rounding

The radar gun display rounds pitch speeds to the nearest ten to keep stats clean.

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

C				C															
3000	50	1300	200	3000	170	7000	500	430	900	50	5000	5000	1700	430	50	30	130	2000	130
170	30	1700	90	2000	4300	50	1700												

Round 2,901 to the nearest thousand → **C**

Round 4,286 to the nearest hundred → **B**

Round 91 to the nearest ten → **H**

Round 512 to the nearest hundred → **U**

Round 1,842 to the nearest thousand → **E**

Round 130 to the nearest ten → **D**

Round 49 to the nearest ten → **A**

Round 1,269 to the nearest hundred → **L**

Round 1,662 to the nearest hundred → **T**

Round 429 to the nearest ten → **R**

Round 34 to the nearest ten → **N**

Round 4,731 to the nearest thousand → **S**

Round 7,173 to the nearest thousand → **F**

Round 218 to the nearest hundred → **I**

Round 920 to the nearest hundred → **W**

Round 169 to the nearest ten → **O**

Scratch space:

CLUE 5**Missing addends - the last clue**

You figure out how many extra spooky treats are needed to complete the team snack box.

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:

$34 + \underline{\quad} = 44$

$12 + \underline{\quad} = 16$

$16 + \underline{\quad} = 21$

$37 + \underline{\quad} = 43$

$24 + \underline{\quad} = 31$

$38 + \underline{\quad} = 40$

$35 + \underline{\quad} = 36$

$35 + \underline{\quad} = 43$

$33 + \underline{\quad} = 45$

$3 + \underline{\quad} = 14$

$4 + \underline{\quad} = 7$

Step 2 - cross out the sentence with each answer:

1. The villain executed a tail swipe, then threw a ghost beanbag.
2. The villain executed a quick slide, then swung a spooky bat.
3. The villain executed a quick slide, then tossed a glowing pumpkin.
4. The villain swung with a power swing, then adjusted a witch hat.
5. The villain used a fast pitch, then adjusted a witch hat.
6. The villain executed a tail swipe, then zoomed on a flying broom.
7. The villain executed a quick slide, then threw a ghost beanbag.
8. The villain performed a high leap, then threw a ghost beanbag.
9. The villain performed a high leap, then adjusted a witch hat.
10. The villain used a fast pitch, then threw a ghost beanbag.
11. The villain executed a tail swipe, then swung a spooky bat.
12. The villain executed a quick slide, then zoomed on a flying broom.

Answer Key

The Halloween World Series Mystery

Culprit: Pumpkin

High Leap · Witch Hat · Left Handed · Calico Fur · Squeaky Toy

Trail: Start 21 → Clue 1 19 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DID NOT USE A SPOOKY BAT"

What is the value of the 5 in 356? = 50 (T) · What is the value of the 1 in 5,177? = 100 (E) · What is the value of the 6 in 96,745? = 6000 (P) · What is the value of the 2 in 254? = 200 (D) · What is the value of the 8 in 5,852? = 800 (A) · What is the value of the 8 in 9,286? = 80 (V) · What is the value of the 9 in 955? = 900 (Y) · What is the value of the 4 in 4,570? = 4000 (S) · What is the value of the 2 in 2,758? = 2000 (H) · What is the value of the 4 in 8,463? = 400 (U) · What is the value of the 7 in 57,858? = 7000 (I) · What is the value of the 7 in 2,735? = 700 (B) · What is the value of the 6 in 769? = 60 (O) · What is the value of the 3 in 5,370? = 300 (K) · What is the value of the 8 in 58,316? = 8000 (N) · What is the value of the 5 in 5,697? = 5000 (L)

Clue 2 (Addition): "A WITNESS SAW A LEFT HANDED PAW PRINT"

1610 + 1715 = 3325 (A) · 1654 + 2344 = 3998 (D) · 5096 + 2424 = 7520 (W) · 4259 + 2495 = 6754 (P) · 4184 + 3154 = 7338 (I) · 807 + 1746 = 2553 (H) · 4522 + 2442 = 6964 (F) · 2027 + 3138 = 5165 (R) · 736 + 1345 = 2081 (E) · 3935 + 2880 = 6815 (S) · 3515 + 3583 = 7098 (L) · 4028 + 3020 = 7048 (T) · 3809 + 1927 = 5736 (N)

Clue 3 (Subtraction): "THE VILLAIN WAS TRICKED BY A SQUEAKY TOY"

6043 - 1947 = 4096 (T) · 5101 - 1597 = 3504 (R) · 5111 - 755 = 4356 (B) · 9214 - 1224 = 7990 (O) · 10855 - 4041 = 6814 (C) · 5266 - 1727 = 3539 (A) · 5255 - 1146 = 4109 (D) · 9048 - 3125 = 5923 (K) · 4017 - 334 = 3683 (N) · 8726 - 2690 = 6036 (H) · 9717 - 4838 = 4879 (W) · 5829 - 4360 = 1469 (E) · 7295 - 790 = 6505 (L) · 9796 - 902 = 8894 (Q) · 6941 - 1846 = 5095 (I) · 2040 - 797 = 1243 (V) · 8908 - 4307 = 4601 (Y) · 6241 - 1054 = 5187 (S) · 11202 - 2615 = 8587 (U)

Clue 4 (Rounding): "CALICO FUR WAS STRANDED ON THE BAT"

Round 2,901 to the nearest thousand = 3000 (C) · Round 4,286 to the nearest hundred = 4300 (B) · Round 91 to the nearest ten = 90 (H) · Round 512 to the nearest hundred = 500 (U) · Round 1,842 to the nearest thousand = 2000 (E) · Round 130 to the nearest ten = 130 (D) · Round 49 to the nearest ten = 50 (A) · Round 1,269 to the nearest hundred = 1300 (L) · Round 1,662 to the nearest hundred = 1700 (T) · Round 429 to the nearest ten = 430 (R) · Round 34 to the nearest ten = 30 (N) · Round 4,731 to the nearest thousand = 5000 (S) · Round 7,173 to the nearest thousand = 7000 (F) · Round 218 to the nearest hundred = 200 (I) · Round 920 to the nearest hundred = 900 (W) · Round 169 to the nearest ten = 170 (O)

Clue 5 (Missing addends): surviving statement is box 9 → Pumpkin

34 + ___ = 44 = 10 · 12 + ___ = 16 = 4 · 16 + ___ = 21 = 5 · 37 + ___ = 43 = 6 · 24 + ___ = 31 = 7 · 38 + ___ = 40 = 2 · 35 + ___ = 36 = 1 · 35 + ___ = 43 = 8 · 33 + ___ = 45 = 12 · 3 + ___ = 14 = 11 · 4 + ___ = 7 = 3