



The Hogwarts Snitch Snatcher

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

Detective: _____ **Date:** _____

A golden snitch has been stolen right out of the trophy case at Hogwarts Castle! The Headmaster needs your help to find the culprit before the big Quidditch match starts. Use your wizarding mind and your math skills to crack the case!

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 the mischievous spellcaster is _____

Possible suspects

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

NAME	FAVORITE SPELL	MAGICAL PET	WAND HAND	HAIR COLOR	BOGGART FEAR
Seamus F	Wingardium Leviosa	Black Rat	Left-handed	Bright Red	Dementor
Susan B	Alohomora	Ginger Cat	Right-handed	Bushy Brown	Spider
Oliver W	Wingardium Leviosa	Ginger Cat	Left-handed	Messy Black	Dementor
Hannah A	Alohomora	Snowy Owl	Right-handed	Bright Red	Dementor
Parvati P	Expelliarmus	Ginger Cat	Right-handed	Bushy Brown	Dementor
Justin F	Expelliarmus	Toad	Left-handed	Messy Black	Howler
Harry P	Expecto Patronum	Baby Dragon	Left-handed	Messy Black	Spider
George W	Expelliarmus	Baby Dragon	Left-handed	Bright Red	Dementor
Luna L	Wingardium Leviosa	Toad	Right-handed	Bushy Brown	Dementor
Neville L	Expecto Patronum	Snowy Owl	Right-handed	Messy Black	Dementor
Draco M	Lumos	Toad	Left-handed	Messy Black	Howler
Cedric D	Wingardium Leviosa	Baby Dragon	Left-handed	Bright Red	Dementor
Cho C	Alohomora	Snowy Owl	Left-handed	Bright Red	Dementor
Percy W	Wingardium Leviosa	Baby Dragon	Right-handed	Bushy Brown	Dementor
Lavender B	Expecto Patronum	Toad	Right-handed	Messy Black	Spider
Padma P	Alohomora	Ginger Cat	Left-handed	Bright Red	Howler
Hermione G	Alohomora	Toad	Left-handed	Bright Red	Dementor
Zach Smith	Alohomora	Baby Dragon	Right-handed	Bushy Brown	Spider
Ron W	Expelliarmus	Black Rat	Left-handed	Bright Red	Dementor
Colin C	Expecto Patronum	Toad	Right-handed	Bushy Brown	Howler
Dean T	Expelliarmus	Snowy Owl	Left-handed	Bright Red	Spider

CLUE 1 Place value

We found a secret message written in glowing runes. To read the numbers, you must look at which place the digits are holding.

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

A number line from 0 to 10,000. The line is marked with boxes for numbers. The numbers are: 30, 9000, 8000, 80, 700, 7000, 7000, 800, 700, 1000, 3000, 300, 8000, 5000, 1000, 300, 30. The boxes for 30 and 30 are shaded orange and contain the letter 'T'. The box for 3000 is shaded orange and contains the letter 'T'.

What is the value of the 3 in 4,437? → **T**

What is the value of the 9 in 69,747? → **H**

What is the value of the 8 in 846? → **A**

What is the value of the 2 in 420? → **R**

What is the value of the 8 in 1,689? → **V**

What is the value of the 7 in 17,092? → **L**

What is the value of the 3 in 380? → **0**

What is the value of the 5 in 5,979? → **S**

What is the value of the 9 in 8,296? → **K**

What is the value of the 8 in 8,340? → **E**

What is the value of the 6 in 969? → **B**

What is the value of the 3 in 63,202? → **D**

What is the value of the 1 in 81,833? → **N**

What is the value of the 7 in 6,471? → **C**

What is the value of the 7 in 796? →

Scratch space:

CLUE 2 Addition

The potion master is counting the floo powder jars left in the cabinet. Help him add them up to find the next clue.

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

T					T												T
533	913	470	292	567	533	845	470	507	507	507	628	292	628	833	470	784	533

								T	
913	628	845	319	470	319	978	628	507	533

$232 + 301 = \square \rightarrow \text{[T]}$

$455 + 390 = \square \rightarrow \text{[N]}$

$488 + 490 = \square \rightarrow \text{[C]}$

$309 + 524 = \square \rightarrow \text{[L]}$

$205 + 265 = \square \rightarrow \text{[E]}$

$491 + 293 = \square \rightarrow \text{[F]}$

$173 + 119 = \square \rightarrow \text{[W]}$

$318 + 189 = \square \rightarrow \text{[S]}$

$182 + 385 = \square \rightarrow \text{[I]}$

$627 + 286 = \square \rightarrow \text{[H]}$

$277 + 351 = \square \rightarrow \text{[A]}$

$167 + 152 = \square \rightarrow \text{[D]}$

Scratch space:

CLUE 3
Subtraction

Some pages have been ripped out of a dusty library book. Subtract the remaining pages from the total to see what is missing.

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

T										T	T								T	
212	745	517	484	848	533	533	641	202	212	212	896	202	715	517	692	730	715	212	848	

						T		
641	692	517	274	517	715	212	848	202

$223 - 11 = \square \rightarrow \text{[T]}$

$986 - 294 = \square \rightarrow \text{[D]}$

$278 - 4 = \square \rightarrow \text{[M]}$

$1104 - 359 = \square \rightarrow \text{[H]}$

$677 - 36 = \square \rightarrow \text{[A]}$

$914 - 184 = \square \rightarrow \text{[I]}$

$1124 - 276 = \square \rightarrow \text{[O]}$

$1182 - 286 = \square \rightarrow \text{[U]}$

$819 - 302 = \square \rightarrow \text{[E]}$

$620 - 87 = \square \rightarrow \text{[G]}$

$315 - 113 = \square \rightarrow \text{[R]}$

$502 - 18 = \square \rightarrow \text{[B]}$

$741 - 26 = \square \rightarrow \text{[N]}$

Scratch space:

CLUE 4 Rounding

An enchanted crystal ball is glowing. It only shows numbers rounded to the nearest ten, so we must round them to read the map.

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

A											A								
50	800	500	40	60	7000	2000	500	300	70	7000	50	40	500	3000	6000	20	600	60	
2000	90	2000	7000	300	3000	50	20	6000	70	500	90	600							

Round 52 to the nearest ten → **A**

Round 89 to the nearest ten → **O**

Round 7,085 to the nearest thousand → **H**

Round 2,962 to the nearest thousand → **C**

Round 59 to the nearest ten → **G**

Round 6,037 to the nearest thousand → **L**

Round 524 to the nearest hundred → **R**

Round 40 to the nearest ten → **I**

Round 66 to the nearest ten → **D**

Round 551 to the nearest hundred → **N**

Round 2,435 to the nearest thousand → **T**

Round 338 to the nearest hundred → **E**

Round 778 to the nearest hundred → **B**

Round 24 to the nearest ten → **U**

Scratch space:

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

To balance the golden scales, we need to find the missing ounces of moonstone. Solve the puzzle to unlock the final 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:

$6 + \underline{\quad} = 9$

$9 + \underline{\quad} = 19$

$8 + \underline{\quad} = 9$

$5 + \underline{\quad} = 11$

$8 + \underline{\quad} = 15$

$1 + \underline{\quad} = 12$

$10 + \underline{\quad} = 18$

$1 + \underline{\quad} = 5$

$8 + \underline{\quad} = 20$

$3 + \underline{\quad} = 12$

$5 + \underline{\quad} = 10$

Step 2 - cross out the sentence with each answer:

1. The villain cast a locking charm, then fled on a nimbus broomstick.
2. The villain brewed a sleeping draught, then hid under an invisibility cloak.
3. The villain cast a locking charm, then dropped a handful of stinkbombs.
4. The villain sneaked past the sleepy portrait, then fled on a nimbus broomstick.
5. The villain cast a locking charm, then left a trail of glowing sparks.
6. The villain vanished the classroom door, then fled on a nimbus broomstick.
7. The villain sneaked past the sleepy portrait, then dropped a handful of stinkbombs.
8. The villain sneaked past the sleepy portrait, then scurried down the secret passage.
9. The villain brewed a sleeping draught, then dropped a handful of stinkbombs.
10. The villain shrank the trophy cabinet, then hid under an invisibility cloak.
11. The villain vanished the classroom door, then left a trail of glowing sparks.
12. The villain vanished the classroom door, then dropped a handful of stinkbombs.

Answer Key

The Hogwarts Snitch Snatcher

Culprit: George W

Expelliarmus · Baby Dragon · Left-handed · Bright Red · Dementor

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 HAVE A BLACK RAT"

What is the value of the 3 in 4,437? = 30 (T) · What is the value of the 9 in 69,747? = 9000 (H) · What is the value of the 8 in 846? = 800 (A) · What is the value of the 2 in 420? = 20 (R) · What is the value of the 8 in 1,689? = 80 (V) · What is the value of the 7 in 17,092? = 7000 (L) · What is the value of the 3 in 380? = 300 (O) · What is the value of the 5 in 5,979? = 5000 (S) · What is the value of the 9 in 8,296? = 90 (K) · What is the value of the 8 in 8,340? = 8000 (E) · What is the value of the 6 in 969? = 60 (B) · What is the value of the 3 in 63,202? = 3000 (D) · What is the value of the 1 in 81,833? = 1000 (N) · What is the value of the 7 in 6,471? = 70 (C) · What is the value of the 7 in 796? = 700 (I)

Clue 2 (Addition): "THE WITNESS SAW A LEFT HANDED CAST"

$232 + 301 = 533$ (T) · $455 + 390 = 845$ (N) · $488 + 490 = 978$ (C) · $309 + 524 = 833$ (L) · $205 + 265 = 470$ (E) · $491 + 293 = 784$ (F) · $173 + 119 = 292$ (W) · $318 + 189 = 507$ (S) · $182 + 385 = 567$ (I) · $627 + 286 = 913$ (H) · $277 + 351 = 628$ (A) · $167 + 152 = 319$ (D)

Clue 3 (Subtraction): "THE BOGGART TURNED INTO A DEMENTOR"

$223 - 11 = 212$ (T) · $986 - 294 = 692$ (D) · $278 - 4 = 274$ (M) · $1104 - 359 = 745$ (H) · $677 - 36 = 641$ (A) · $914 - 184 = 730$ (I) · $1124 - 276 = 848$ (O) · $1182 - 286 = 896$ (U) · $819 - 302 = 517$ (E) · $620 - 87 = 533$ (G) · $315 - 113 = 202$ (R) · $502 - 18 = 484$ (B) · $741 - 26 = 715$ (N)

Clue 4 (Rounding): "A BRIGHT RED HAIR CLUNG TO THE CAULDRON"

Round 52 to the nearest ten = 50 (A) · Round 89 to the nearest ten = 90 (O) · Round 7,085 to the nearest thousand = 7000 (H) · Round 2,962 to the nearest thousand = 3000 (C) · Round 59 to the nearest ten = 60 (G) · Round 6,037 to the nearest thousand = 6000 (L) · Round 524 to the nearest hundred = 500 (R) · Round 40 to the nearest ten = 40 (I) · Round 66 to the nearest ten = 70 (D) · Round 551 to the nearest hundred = 600 (N) · Round 2,435 to the nearest thousand = 2000 (T) · Round 338 to the nearest hundred = 300 (E) · Round 778 to the nearest hundred = 800 (B) · Round 24 to the nearest ten = 20 (U)

Clue 5 (Missing addends): surviving statement is box 2 → George W

$6 + \underline{\quad} = 9 = 3$ · $9 + \underline{\quad} = 19 = 10$ · $8 + \underline{\quad} = 9 = 1$ · $5 + \underline{\quad} = 11 = 6$ · $8 + \underline{\quad} = 15 = 7$ · $1 + \underline{\quad} = 12 = 11$ · $10 + \underline{\quad} = 18 = 8$ · $1 + \underline{\quad} = 5 = 4$ · $8 + \underline{\quad} = 20 = 12$ · $3 + \underline{\quad} = 12 = 9$ · $5 + \underline{\quad} = 10 = 5$