



# 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.

Diagram illustrating the numbers 30, 9000, 8000, 80, 700, 7000, 7000, 800, 700, 1000, 3000, 300, 8000, 5000, 1000, 300, and 30. The numbers are arranged in two rows. The first row contains 18 boxes, and the second row contains 15 boxes. The first and last boxes in the first row, and the last box in the second row, are highlighted in orange and labeled '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.

|              |     |     |     |     |              |     |     |     |     |     |     |     |     |     |     |     |              |
|--------------|-----|-----|-----|-----|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------|
| <div>T</div> |     |     |     |     | <div>T</div> |     |     |     |     |     |     |     |     |     |     |     | <div>T</div> |
| 533          | 913 | 470 | 292 | 567 | 533          | 845 | 470 | 507 | 507 | 507 | 628 | 292 | 628 | 833 | 470 | 784 | 533          |

  

|     |     |     |     |     |     |     |     |              |     |
|-----|-----|-----|-----|-----|-----|-----|-----|--------------|-----|
|     |     |     |     |     |     |     |     | <div>T</div> |     |
| 913 | 628 | 845 | 319 | 470 | 319 | 978 | 628 | 507          | 533 |

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

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

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

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

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

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

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

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

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

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

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

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

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.

|              |     |     |     |     |     |              |     |     |     |              |              |     |     |     |     |     |     |     |     |              |  |
|--------------|-----|-----|-----|-----|-----|--------------|-----|-----|-----|--------------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|--|
| <div>T</div> |     |     |     |     |     |              |     |     |     | <div>T</div> | <div>T</div> |     |     |     |     |     |     |     |     | <div>T</div> |  |
| 212          | 745 | 517 | 484 | 848 | 533 | 533          | 641 | 202 | 212 | 212          | 896          | 202 | 715 | 517 | 692 | 730 | 715 | 212 | 848 |              |  |
|              |     |     |     |     |     | <div>T</div> |     |     |     |              |              |     |     |     |     |     |     |     |     |              |  |
| 641          | 692 | 517 | 274 | 517 | 715 | 212          | 848 | 202 |     |              |              |     |     |     |     |     |     |     |     |              |  |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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