



# The Phantom of Whispering Pines

Grade 3 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: \_\_\_\_\_ Date: \_\_\_\_\_

Someone has stolen the Grand Phantom's glowing green ectoplasm jar from the parlor! Without it, the ghosts will lose their spooky glow. As the junior detective, you must find out which of the manor's resident ghouls took it before the clock strikes midnight.

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 spectral thief is** \_\_\_\_\_

## Possible suspects

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

NAME	SPOOKY SPELL	HAUNTING GEAR	GHOST FORM	ECTOPLASM TRAIL	SCARE LIMIT
Beatrice	glowing freeze	broken clock	phantom girl	glowing green mist	loud vacuums
Barnaby	poltergeist toss	floating lantern	phantom boy	foggy white smoke	loud vacuums
Jasper	slime splash	broken clock	phantom girl	foggy white smoke	salty crackers
Giddy	glowing freeze	dusty chains	phantom boy	foggy white smoke	loud vacuums
Thaddeus	glowing freeze	floating lantern	phantom girl	glowing green mist	bright flashlights
Rufus	shadow warp	floating lantern	phantom boy	dusty grey cobwebs	salty crackers
Felix	slime splash	floating lantern	phantom boy	dusty grey cobwebs	salty crackers
Tabitha	chilling howl	rusty key	phantom girl	foggy white smoke	salty crackers
Hattie	glowing freeze	creaky boots	phantom girl	foggy white smoke	loud vacuums
Simon	glowing freeze	rusty key	phantom boy	glowing green mist	salty crackers
Oliver	shadow warp	floating lantern	phantom boy	glowing green mist	bright flashlights
Prudence	chilling howl	creaky boots	phantom boy	foggy white smoke	loud vacuums
Pip	poltergeist toss	creaky boots	phantom girl	dusty grey cobwebs	salty crackers
Casper	glowing freeze	rusty key	phantom boy	foggy white smoke	loud vacuums
Gideon	poltergeist toss	dusty chains	phantom boy	foggy white smoke	salty crackers
Millicent	glowing freeze	floating lantern	phantom girl	glowing green mist	salty crackers
Silas	chilling howl	broken clock	phantom boy	glowing green mist	loud vacuums
Martha	chilling howl	broken clock	phantom girl	dusty grey cobwebs	salty crackers
Montgomery	shadow warp	floating lantern	phantom boy	foggy white smoke	salty crackers
Clara	shadow warp	creaky boots	phantom girl	glowing green mist	salty crackers
Penny	glowing freeze	creaky boots	phantom boy	foggy white smoke	loud vacuums



**CLUE 2** Addition

You find dusty footprints in the hallway. You must add the tallies on the left wall to the ones on the right wall to count them all.

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
232	270	632	760	371	232	619	632	312	312	312	677	760	677

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
416	270	677	619	232	898	939	869	898	954	601	561	619

107 + 125 =	<input type="checkbox"/>	<input type="checkbox"/>	538 + 401 =	<input type="checkbox"/>	<input type="checkbox"/>	382 + 219 =	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<b>T</b>		<input type="checkbox"/>	<b>M</b>		<input type="checkbox"/>	<b>R</b>
398 + 234 =	<input type="checkbox"/>	<input type="checkbox"/>	182 + 130 =	<input type="checkbox"/>	<input type="checkbox"/>	248 + 429 =	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<b>E</b>		<input type="checkbox"/>	<b>S</b>		<input type="checkbox"/>	<b>A</b>
302 + 652 =	<input type="checkbox"/>	<input type="checkbox"/>	240 + 379 =	<input type="checkbox"/>	<input type="checkbox"/>	207 + 354 =	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<b>Y</b>		<input type="checkbox"/>	<b>N</b>		<input type="checkbox"/>	<b>U</b>
192 + 224 =	<input type="checkbox"/>	<input type="checkbox"/>	314 + 584 =	<input type="checkbox"/>	<input type="checkbox"/>	81 + 189 =	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<b>P</b>		<input type="checkbox"/>	<b>O</b>		<input type="checkbox"/>	<b>H</b>
170 + 201 =	<input type="checkbox"/>	<input type="checkbox"/>	573 + 296 =	<input type="checkbox"/>	<input type="checkbox"/>	370 + 390 =	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<b>I</b>		<input type="checkbox"/>	<b>B</b>		<input type="checkbox"/>	<b>W</b>

Scratch space:

**CLUE 3**

**Subtraction**

The grand grandfather clock is chiming loudly. You subtract the quiet chimes from the extra loud chimes to stop the noise and hear a clue.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
197	398	581	724	398	586	703	197	852	247	316	173	852	586	653	431	586	654	766
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
692	247	816	654	654	653	703												

285 - 88 =	<input type="text"/>	<input type="text" value="T"/>	773 - 7 =	<input type="text"/>	<input type="text" value="D"/>	450 - 19 =	<input type="text"/>	<input type="text" value="L"/>
767 - 369 =	<input type="text"/>	<input type="text" value="H"/>	509 - 262 =	<input type="text"/>	<input type="text" value="A"/>	502 - 329 =	<input type="text"/>	<input type="text" value="F"/>
401 - 85 =	<input type="text"/>	<input type="text" value="N"/>	834 - 248 =	<input type="text"/>	<input type="text" value="O"/>	848 - 267 =	<input type="text"/>	<input type="text" value="E"/>
960 - 257 =	<input type="text"/>	<input type="text" value="S"/>	1023 - 299 =	<input type="text"/>	<input type="text" value="G"/>	964 - 112 =	<input type="text"/>	<input type="text" value="R"/>
824 - 8 =	<input type="text"/>	<input type="text" value="C"/>	906 - 253 =	<input type="text"/>	<input type="text" value="M"/>	844 - 190 =	<input type="text"/>	<input type="text" value="U"/>
833 - 141 =	<input type="text"/>	<input type="text" value="V"/>						

Scratch space:

**CLUE 4**

**Multiplication facts (1-12)**

The floating candelabras are arranged in neat rows. Multiply the number of rows by the candles in each row to light up the dark cellar.

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

<input type="text" value="W"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="W"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
144	60	32	70	49	25	7	32	70	77	77	42	144	120	121	22	60
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>												
15	45	70	20	60												

$12 \times 12 =$	<input type="text"/>	<input type="text" value="W"/>	$4 \times 5 =$	<input type="text"/>	<input type="text" value="K"/>	$11 \times 7 =$	<input type="text"/>	<input type="text" value="G"/>
$5 \times 5 =$	<input type="text"/>	<input type="text" value="N"/>	$10 \times 7 =$	<input type="text"/>	<input type="text" value="O"/>	$1 \times 7 =$	<input type="text"/>	<input type="text" value="D"/>
$5 \times 3 =$	<input type="text"/>	<input type="text" value="S"/>	$7 \times 6 =$	<input type="text"/>	<input type="text" value="Y"/>	$8 \times 4 =$	<input type="text"/>	<input type="text" value="F"/>
$6 \times 10 =$	<input type="text"/>	<input type="text" value="E"/>	$10 \times 12 =$	<input type="text"/>	<input type="text" value="H"/>	$11 \times 11 =$	<input type="text"/>	<input type="text" value="I"/>
$7 \times 7 =$	<input type="text"/>	<input type="text" value="U"/>	$5 \times 9 =$	<input type="text"/>	<input type="text" value="M"/>	$11 \times 2 =$	<input type="text"/>	<input type="text" value="T"/>

Scratch space:

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

The ghosts left behind a pile of glowing candy corn. Divide the sweet treats equally among the jars to open the secret closet.

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:**

$15 \div 3 = \boxed{\phantom{00}}$

$30 \div 10 = \boxed{\phantom{00}}$

$18 \div 2 = \boxed{\phantom{00}}$

$77 \div 11 = \boxed{\phantom{00}}$

$36 \div 3 = \boxed{\phantom{00}}$

$121 \div 11 = \boxed{\phantom{00}}$

$24 \div 6 = \boxed{\phantom{00}}$

$24 \div 12 = \boxed{\phantom{00}}$

$66 \div 11 = \boxed{\phantom{00}}$

$88 \div 11 = \boxed{\phantom{00}}$

$70 \div 7 = \boxed{\phantom{00}}$

**Step 2 - cross out the sentence with each answer:**

1. The villain uses glowing freeze to lock the door, then rattles some dusty chains.
2. The villain creates a slime splash on the carpet, then rattles some dusty chains.
3. The villain triggers a poltergeist toss of books, then waves a floating lantern.
4. The villain uses glowing freeze to lock the door, then drops a rusty key.
5. The villain uses glowing freeze to lock the door, then stomps in creaky boots.
6. The villain triggers a poltergeist toss of books, then winds up a broken clock.
7. The villain uses glowing freeze to lock the door, then waves a floating lantern.
8. The villain performs a shadow warp through the wall, then stomps in creaky boots.
9. The villain makes a chilling howl to scare the cats, then stomps in creaky boots.
10. The villain makes a chilling howl to scare the cats, then winds up a broken clock.
11. The villain creates a slime splash on the carpet, then stomps in creaky boots.
12. The villain triggers a poltergeist toss of books, then rattles some dusty chains.

# Answer Key

## The Phantom of Whispering Pines

### Culprit: Giddy

glowing freeze · dusty chains · phantom boy · foggy white smoke · loud vacuums

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

### Clue 1 (Rounding): "THE THIEF DOES NOT HAVE A RUSTY KEY"

Round 4,916 to the nearest thousand = 5000 (T) · Round 54 to the nearest ten = 50 (Y) · Round 3,454 to the nearest thousand = 3000 (A) · Round 19 to the nearest ten = 20 (V) · Round 359 to the nearest hundred = 400 (E) · Round 1,623 to the nearest thousand = 2000 (R) · Round 702 to the nearest hundred = 700 (N) · Round 6,178 to the nearest thousand = 6000 (K) · Round 6,942 to the nearest thousand = 7000 (O) · Round 58 to the nearest ten = 60 (I) · Round 8,385 to the nearest thousand = 8000 (U) · Round 299 to the nearest hundred = 300 (S) · Round 508 to the nearest hundred = 500 (F) · Round 572 to the nearest hundred = 600 (H) · Round 245 to the nearest hundred = 200 (D)

### Clue 2 (Addition): "THE WITNESS SAW A PHANTOM BOY RUN"

$107 + 125 = 232$  (T) ·  $538 + 401 = 939$  (M) ·  $382 + 219 = 601$  (R) ·  $398 + 234 = 632$  (E) ·  $182 + 130 = 312$  (S) ·  $248 + 429 = 677$  (A) ·  $302 + 652 = 954$  (Y) ·  $240 + 379 = 619$  (N) ·  $207 + 354 = 561$  (U) ·  $192 + 224 = 416$  (P) ·  $314 + 584 = 898$  (O) ·  $81 + 189 = 270$  (H) ·  $170 + 201 = 371$  (I) ·  $573 + 296 = 869$  (B) ·  $370 + 390 = 760$  (W)

### Clue 3 (Subtraction): "THE GHOST RAN FROM LOUD VACUUMS"

$285 - 88 = 197$  (T) ·  $773 - 7 = 766$  (D) ·  $450 - 19 = 431$  (L) ·  $767 - 369 = 398$  (H) ·  $509 - 262 = 247$  (A) ·  $502 - 329 = 173$  (F) ·  $401 - 85 = 316$  (N) ·  $834 - 248 = 586$  (O) ·  $848 - 267 = 581$  (E) ·  $960 - 257 = 703$  (S) ·  $1023 - 299 = 724$  (G) ·  $964 - 112 = 852$  (R) ·  $824 - 8 = 816$  (C) ·  $906 - 253 = 653$  (M) ·  $844 - 190 = 654$  (U) ·  $833 - 141 = 692$  (V)

### Clue 4 (Multiplication facts (1-12)): "WE FOUND FOGGY WHITE SMOKE"

$12 \times 12 = 144$  (W) ·  $4 \times 5 = 20$  (K) ·  $11 \times 7 = 77$  (G) ·  $5 \times 5 = 25$  (N) ·  $10 \times 7 = 70$  (O) ·  $1 \times 7 = 7$  (D) ·  $5 \times 3 = 15$  (S) ·  $7 \times 6 = 42$  (Y) ·  $8 \times 4 = 32$  (F) ·  $6 \times 10 = 60$  (E) ·  $10 \times 12 = 120$  (H) ·  $11 \times 11 = 121$  (I) ·  $7 \times 7 = 49$  (U) ·  $5 \times 9 = 45$  (M) ·  $11 \times 2 = 22$  (T)

### Clue 5 (Division facts (1-12)): surviving statement is box 1 → Giddy

$15 \div 3 = 5$  ·  $30 \div 10 = 3$  ·  $18 \div 2 = 9$  ·  $77 \div 11 = 7$  ·  $36 \div 3 = 12$  ·  $121 \div 11 = 11$  ·  $24 \div 6 = 4$  ·  $24 \div 12 = 2$  ·  $66 \div 11 = 6$  ·  $88 \div 11 = 8$  ·  $70 \div 7 = 10$