



The Secrets of the Stone Maze

Grade 4 math · Fractions of a number, Multiplication, Rounding, Addition · Reading level grades 3-4

Detective: _____ **Date:** _____

A sneaky Maze Goblin has stolen the Golden Compass from the Chief Cartographer! Now the stone paths are shifting and we are lost inside the walls. We must find the thief before the maze locks forever.

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 Maze Goblin is _____

Possible suspects

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

NAME	NAVIGATION POWER	CARRIED GEAR	PATH PREFERENCE	HEAD MOSS OR HAIR	SECRET DISTRACTION
Penelope	Melts in Shadows	Golden Chisel	Turns Right	Flame Red Hair	Blinded by Torchlight
Helen	Walks Thru Stone	Bronze Key	Turns Left	Spiderweb Grey Hair	Blinded by Torchlight
Nestor	Finds Secret Paths	Bronze Key	Turns Right	Flame Red Hair	Blinded by Torchlight
Ariadne	Walks Thru Stone	Bronze Key	Turns Left	Mossy Green Hair	Calmed by Flute Music
Orion	Walks Thru Stone	Winged Boots	Turns Right	Flame Red Hair	Calmed by Flute Music
Achilles	Shifts Walls	Bronze Key	Turns Left	Flame Red Hair	Blinded by Torchlight
Medea	Springs Traps	Glowing Lantern	Turns Right	Flame Red Hair	Calmed by Flute Music
Castor	Springs Traps	Glowing Lantern	Turns Right	Spiderweb Grey Hair	Blinded by Torchlight
Daedalus	Walks Thru Stone	Silver Thread	Turns Right	Flame Red Hair	Blinded by Torchlight
Icarus	Shifts Walls	Bronze Key	Turns Left	Flame Red Hair	Distracted by Honey
Pollux	Shifts Walls	Winged Boots	Turns Right	Flame Red Hair	Blinded by Torchlight
Paris	Springs Traps	Bronze Key	Turns Left	Flame Red Hair	Distracted by Honey
Perseus	Springs Traps	Winged Boots	Turns Right	Mossy Green Hair	Distracted by Honey
Telemachus	Springs Traps	Bronze Key	Turns Right	Flame Red Hair	Distracted by Honey
Jason	Walks Thru Stone	Glowing Lantern	Turns Left	Spiderweb Grey Hair	Distracted by Honey
Ajax	Melts in Shadows	Glowing Lantern	Turns Right	Spiderweb Grey Hair	Blinded by Torchlight
Odysseus	Melts in Shadows	Glowing Lantern	Turns Left	Mossy Green Hair	Distracted by Honey
Minos	Shifts Walls	Bronze Key	Turns Left	Mossy Green Hair	Distracted by Honey
Asterius	Finds Secret Paths	Silver Thread	Turns Right	Flame Red Hair	Blinded by Torchlight
Hercules	Walks Thru Stone	Bronze Key	Turns Right	Flame Red Hair	Distracted by Honey
Theseus	Walks Thru Stone	Bronze Key	Turns Right	Mossy Green Hair	Blinded by Torchlight

CLUE 1

Fractions of a number

We find ancient runes carved on the floor. Only a fraction of the tiles are glowing. If we find that exact amount, the runes will reveal the first clue.

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

T			T											T			
30	21	6	30	21	9	6	15	28	32	6	24	37	32	30	16	24	6
T																	
30	21	6	19	32	5	28	6	37	11	21	9	24	6	5			

$3/6 \text{ of } 60 = \square \rightarrow \boxed{\text{T}}$

$7/8 \text{ of } 24 = \square \rightarrow \boxed{\text{H}}$

$2/3 \text{ of } 48 = \square \rightarrow \boxed{\text{O}}$

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

$1/3 \text{ of } 57 = \square \rightarrow \boxed{\text{G}}$

$2/8 \text{ of } 96 = \square \rightarrow \boxed{\text{S}}$

$1/5 \text{ of } 30 = \square \rightarrow \boxed{\text{E}}$

$2/6 \text{ of } 84 = \square \rightarrow \boxed{\text{D}}$

$1/6 \text{ of } 90 = \square \rightarrow \boxed{\text{F}}$

$2/6 \text{ of } 111 = \square \rightarrow \boxed{\text{N}}$

$1/2 \text{ of } 22 = \square \rightarrow \boxed{\text{C}}$

$1/5 \text{ of } 45 = \square \rightarrow \boxed{\text{I}}$

$2/8 \text{ of } 64 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 2
Multiplication facts (1-12)

The path splits into identical rows of dusty stone jars. If we multiply the rows by the number of jars in each row, we can clear them away to find a clue.

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

T										T										T	
42	55	77	88	48	88	50	77	45	42	50	6	77	2	77	6	88	42	1			

T									T							
42	48	6	20	6	63	33	55	42	10	96	81	10	72	88		

$6 \times 7 = \square \rightarrow$ T	$7 \times 9 = \square \rightarrow$ I	$1 \times 2 = \square \rightarrow$ F	$12 \times 4 = \square \rightarrow$ U
$1 \times 1 = \square \rightarrow$ O	$8 \times 12 = \square \rightarrow$ L	$5 \times 11 = \square \rightarrow$ H	
$9 \times 9 = \square \rightarrow$ W	$2 \times 5 = \square \rightarrow$ A	$7 \times 11 = \square \rightarrow$ E	
$10 \times 5 = \square \rightarrow$ P	$11 \times 8 = \square \rightarrow$ S	$5 \times 9 = \square \rightarrow$ C	
$3 \times 11 = \square \rightarrow$ G	$1 \times 6 = \square \rightarrow$ R	$2 \times 10 = \square \rightarrow$ N	
$9 \times 8 = \square \rightarrow$ Y			

Scratch space:

CLUE 3 Rounding

A magic sundial measures the shifting shadows. The dial shows a long decimal number, but the door will only open if we round it to the nearest whole number.

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

B															
230	3700	20	3000	30	70	70	2300	3700	2900	30	110	20	3000	30	70

B														
230	110	20	1300	900	7000	70	30	20	7000	70	30	20	9000	430

Round 229 to the nearest ten → **B**

Round 3,671 to the nearest hundred → **R**

Round 18 to the nearest ten → **I**

Round 430 to the nearest ten → **F**

Round 74 to the nearest ten → **T**

Round 2,981 to the nearest thousand → **G**

Round 927 to the nearest hundred → **D**

Round 2,322 to the nearest hundred → **O**

Round 6,996 to the nearest thousand → **S**

Round 9,063 to the nearest thousand → **E**

Round 2,892 to the nearest hundred → **C**

Round 110 to the nearest ten → **L**

Round 1,342 to the nearest hundred → **N**

Round 32 to the nearest ten → **H**

Scratch space:

CLUE 4 Addition

We find a pile of discarded climbing gear. Let us add the steel spikes and the iron hooks together to see how much gear the thief left behind.

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

F																			
2298	7312	6197	4648	6719	4439	6719	9817	8735	6197	9487	4439	9461	7312	8276	8187	8567	9487	7593	

3667	8735	6719	9817	6197	4439	8852	3458	8276	4439	7593	6719	4439

755 + 1543 = → F	5546 + 3915 = → G	3256 + 5020 = → O
3201 + 1447 = → M	3457 + 4730 = → W	1093 + 2365 = → C
4692 + 3875 = → S	3065 + 1374 = → R	4695 + 4040 = → H
3062 + 4250 = → L	3432 + 2765 = → A	3287 + 3432 = → E
5347 + 4470 = → D	2301 + 1366 = → T	5640 + 3847 = → I
5425 + 3427 = → K	5028 + 2565 = → N	

Scratch space:

CLUE 5**Fractions of a number - the last clue**

A heavy stone chest sits in the corner. We must gather a specific fraction of the keys scattered on the floor to unlock it and read the final clue.

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:

$2/6 \text{ of } 21 = \boxed{}$

$5/10 \text{ of } 18 = \boxed{}$

$2/4 \text{ of } 2 = \boxed{}$

$1/6 \text{ of } 72 = \boxed{}$

$4/6 \text{ of } 6 = \boxed{}$

$4/10 \text{ of } 15 = \boxed{}$

$1/10 \text{ of } 110 = \boxed{}$

$1/4 \text{ of } 40 = \boxed{}$

$1/8 \text{ of } 24 = \boxed{}$

$1/4 \text{ of } 20 = \boxed{}$

$2/8 \text{ of } 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain steps straight through a solid brick wall, then unravels a spool of silver thread.
2. The villain steps straight through a solid brick wall, then carves a secret doorway with a golden chisel.
3. The villain fades into the dark shadows of the corridor, then flies over a pit using winged boots.
4. The villain triggers a trapdoor to block your path, then unlocks a heavy iron gate with a bronze key.
5. The villain fades into the dark shadows of the corridor, then carves a secret doorway with a golden chisel.
6. The villain slides a giant stone wall aside, then lights the way with a glowing lantern.
7. The villain finds a hidden shortcut through the thorns, then unlocks a heavy iron gate with a bronze key.
8. The villain slides a giant stone wall aside, then flies over a pit using winged boots.
9. The villain finds a hidden shortcut through the thorns, then unravels a spool of silver thread.
10. The villain triggers a trapdoor to block your path, then unravels a spool of silver thread.
11. The villain slides a giant stone wall aside, then unravels a spool of silver thread.
12. The villain steps straight through a solid brick wall, then unlocks a heavy iron gate with a bronze key.

Answer Key

The Secrets of the Stone Maze

Culprit: Pollux

Shifts Walls · Winged Boots · Turns Right · Flame Red Hair · Blinded by Torchlight

Trail: Start 21 → Clue 1 20 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE THIEF DOES NOT USE THE GOLDEN CHISEL"

$\frac{3}{6}$ of 60 = 30 (T) · $\frac{7}{8}$ of 24 = 21 (H) · $\frac{2}{3}$ of 48 = 32 (O) · $\frac{1}{3}$ of 15 = 5 (L) · $\frac{1}{3}$ of 57 = 19 (G) · $\frac{2}{8}$ of 96 = 24 (S) · $\frac{1}{5}$ of 30 = 6 (E) · $\frac{2}{6}$ of 84 = 28 (D) · $\frac{1}{6}$ of 90 = 15 (F) · $\frac{2}{6}$ of 111 = 37 (N) · $\frac{1}{2}$ of 22 = 11 (C) · $\frac{1}{5}$ of 45 = 9 (I) · $\frac{2}{8}$ of 64 = 16 (U)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT PREFERS TO TURN RIGHT ALWAYS"

$6 \times 7 = 42$ (T) · $7 \times 9 = 63$ (I) · $1 \times 2 = 2$ (F) · $12 \times 4 = 48$ (U) · $1 \times 1 = 1$ (O) · $8 \times 12 = 96$ (L) · $5 \times 11 = 55$ (H) · $9 \times 9 = 81$ (W) · $2 \times 5 = 10$ (A) · $7 \times 11 = 77$ (E) · $10 \times 5 = 50$ (P) · $11 \times 8 = 88$ (S) · $5 \times 9 = 45$ (C) · $3 \times 11 = 33$ (G) · $1 \times 6 = 6$ (R) · $2 \times 10 = 20$ (N) · $9 \times 8 = 72$ (Y)

Clue 3 (Rounding): "BRIGHT TORCHLIGHT BLINDS THIS THIEF"

Round 229 to the nearest ten = 230 (B) · Round 3,671 to the nearest hundred = 3700 (R) · Round 18 to the nearest ten = 20 (I) · Round 430 to the nearest ten = 430 (F) · Round 74 to the nearest ten = 70 (T) · Round 2,981 to the nearest thousand = 3000 (G) · Round 927 to the nearest hundred = 900 (D) · Round 2,322 to the nearest hundred = 2300 (O) · Round 6,996 to the nearest thousand = 7000 (S) · Round 9,063 to the nearest thousand = 9000 (E) · Round 2,892 to the nearest hundred = 2900 (C) · Round 110 to the nearest ten = 110 (L) · Round 1,342 to the nearest hundred = 1300 (N) · Round 32 to the nearest ten = 30 (H)

Clue 4 (Addition): "FLAME RED HAIR GLOWS IN THE DARK CORNER"

$755 + 1543 = 2298$ (F) · $5546 + 3915 = 9461$ (G) · $3256 + 5020 = 8276$ (O) · $3201 + 1447 = 4648$ (M) · $3457 + 4730 = 8187$ (W) · $1093 + 2365 = 3458$ (C) · $4692 + 3875 = 8567$ (S) · $3065 + 1374 = 4439$ (R) · $4695 + 4040 = 8735$ (H) · $3062 + 4250 = 7312$ (L) · $3432 + 2765 = 6197$ (A) · $3287 + 3432 = 6719$ (E) · $5347 + 4470 = 9817$ (D) · $2301 + 1366 = 3667$ (T) · $5640 + 3847 = 9487$ (I) · $5425 + 3427 = 8852$ (K) · $5028 + 2565 = 7593$ (N)

Clue 5 (Fractions of a number): surviving statement is box 8 → Pollux

$\frac{2}{6}$ of 21 = 7 · $\frac{5}{10}$ of 18 = 9 · $\frac{2}{4}$ of 2 = 1 · $\frac{1}{6}$ of 72 = 12 · $\frac{4}{6}$ of 6 = 4 · $\frac{4}{10}$ of 15 = 6 · $\frac{1}{10}$ of 110 = 11 · $\frac{1}{4}$ of 40 = 10 · $\frac{1}{8}$ of 24 = 3 · $\frac{1}{4}$ of 20 = 5 · $\frac{2}{8}$ of 8 = 2