



The Golden Pickaxe Mystery

Grade 3 math · Addition, Subtraction, Multiplication, Rounding, Division · Reading level grades 1-2

Detective: _____ Date: _____

Oh no! Someone stole the golden pickaxe from the big town chest! The bad crafter left blocky footprints all over the grass. We must find them before they craft more mischief!

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 Block Thief is _____

Possible suspects

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

NAME	PRIMARY SKILL	FAVORITE ITEM	MINING HAND	HELMET STYLE	FEAR
Notch	Ender Pearl	Water Bucket	Right Handed	Gold Helmet	Snowball
Steve	Ender Pearl	Splash Potion	Right Handed	Leather Cap	Bow and Arrow
Jeb	TNT Blast	Redstone Trap	Left Handed	Gold Helmet	Bow and Arrow
Pearl	Elytra Wings	Splash Potion	Right Handed	Iron Helmet	Snowball
Bdubs	Elytra Wings	Splash Potion	Left Handed	Iron Helmet	Bow and Arrow
Dan	Elytra Wings	Splash Potion	Left Handed	Leather Cap	Snowball
Dream	Lava Bucket	Water Bucket	Left Handed	Iron Helmet	Snowball
Alex	Diamond Sword	Golden Apple	Left Handed	Leather Cap	Snowball
Scar	TNT Blast	Wolf Pet	Right Handed	Gold Helmet	Snowball
Gem	Elytra Wings	Golden Apple	Left Handed	Leather Cap	Snowball
Mumbo	Lava Bucket	Wolf Pet	Left Handed	Iron Helmet	Snowball
Tommy	Diamond Sword	Golden Apple	Left Handed	Gold Helmet	Bow and Arrow
Tango	Diamond Sword	Redstone Trap	Right Handed	Leather Cap	Splash Potion
Wilbur	Ender Pearl	Splash Potion	Right Handed	Leather Cap	Snowball
George	Lava Bucket	Golden Apple	Right Handed	Iron Helmet	Bow and Arrow
Ranboo	TNT Blast	Wolf Pet	Right Handed	Leather Cap	Splash Potion
Tubbo	Lava Bucket	Water Bucket	Left Handed	Leather Cap	Bow and Arrow
Sapnap	TNT Blast	Golden Apple	Left Handed	Leather Cap	Snowball
Keralis	TNT Blast	Wolf Pet	Left Handed	Leather Cap	Bow and Arrow
Etho	Elytra Wings	Water Bucket	Right Handed	Leather Cap	Splash Potion
Aphmau	Lava Bucket	Redstone Trap	Left Handed	Leather Cap	Snowball

CLUE 1 Addition

We need to count our wood blocks. We add them up to find the total.

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

T 285	684	485	T 285	684	304	485	399	511	689	485	496	249	689	T 285	397	496	485
703	485	511	496	T 285	689	249	485	T 285	703	711	784	496					

$137 + 148 = \boxed{} \rightarrow \boxed{\text{T}}$

$126 + 273 = \boxed{} \rightarrow \boxed{\text{F}}$

$277 + 219 = \boxed{} \rightarrow \boxed{\text{S}}$

$205 + 280 = \boxed{} \rightarrow \boxed{\text{E}}$

$489 + 214 = \boxed{} \rightarrow \boxed{\text{R}}$

$256 + 428 = \boxed{} \rightarrow \boxed{\text{H}}$

$114 + 135 = \boxed{} \rightarrow \boxed{\text{N}}$

$314 + 397 = \boxed{} \rightarrow \boxed{\text{A}}$

$124 + 273 = \boxed{} \rightarrow \boxed{\text{U}}$

$294 + 395 = \boxed{} \rightarrow \boxed{\text{O}}$

$174 + 130 = \boxed{} \rightarrow \boxed{\text{I}}$

$252 + 259 = \boxed{} \rightarrow \boxed{\text{D}}$

$541 + 243 = \boxed{} \rightarrow \boxed{\text{P}}$

Scratch space:

CLUE 2

A creeper blew up some of our cobblestone. Let us subtract the broken blocks.

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

582 888 446 565 452 460 236 593 452 430 582 446 593 738 828 690 446 430 582

888 452 859 460 446 460

907 - 325 = → **T**

$669 - 104 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$677 - 217 = \boxed{} \rightarrow \boxed{\text{D}}$

$$437 - 201 = \boxed{} \rightarrow \boxed{\text{C}}$$

$1014 - 155 = \boxed{} \rightarrow \boxed{\text{N}}$

$892 - 299 = \boxed{} \rightarrow \boxed{\text{R}}$

$$998 - 170 = \boxed{} \rightarrow \boxed{\text{S}}$$

$1024 - 136 = \boxed{} \rightarrow \boxed{\text{H}}$

$605 - 159 = \boxed{} \rightarrow \boxed{\text{E}}$

$773 - 321 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$1042 - 304 = \boxed{} \rightarrow \boxed{}$

523 - 93 = → **F**

$990 - 300 = \boxed{} \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 3

Multiplication facts (1-12)

We see rows of torches on the wall. We can multiply to count them fast.

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

T																
49	1	55	36	56	84	84	72	56	110	48	72	110	80	48	70	132

6	110	70	30	54	72	84	84	6

$7 \times 7 = \square \rightarrow \text{T}$

$1 \times 1 = \square \rightarrow \text{H}$

$6 \times 1 = \square \rightarrow \text{S}$

$6 \times 12 = \square \rightarrow \text{A}$

$7 \times 10 = \square \rightarrow \text{O}$

$7 \times 12 = \square \rightarrow \text{L}$

$8 \times 6 = \square \rightarrow \text{R}$

$11 \times 5 = \square \rightarrow \text{E}$

$3 \times 12 = \square \rightarrow \text{V}$

$10 \times 8 = \square \rightarrow \text{F}$

$7 \times 8 = \square \rightarrow \text{I}$

$11 \times 10 = \square \rightarrow \text{N}$

$5 \times 6 = \square \rightarrow \text{W}$

$6 \times 9 = \square \rightarrow \text{B}$

$12 \times 11 = \square \rightarrow \text{M}$

Scratch space:

CLUE 4

Rounding

The spyglass shows a distance. We must round the number to the nearest ten.

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

W																	
5000	3000	7000	40	80	30	300	60	9000	3000	60	8000	200	3000	50	600	60	20

60	8000	8000	200	3000	500	800	8000

Round 4,651 to the nearest thousand → **W**

Round 3,127 to the nearest thousand → **E**

Round 28 to the nearest ten → **N**

Round 54 to the nearest ten → **R**

Round 7,725 to the nearest thousand → **T**

Round 213 to the nearest hundred → **H**

Round 18 to the nearest ten → **P**

Round 630 to the nearest hundred → **C**

Round 37 to the nearest ten → **O**

Round 77 to the nearest ten → **U**

Round 59 to the nearest ten → **A**

Round 9,355 to the nearest thousand → **L**

Round 7,067 to the nearest thousand → **F**

Round 518 to the nearest hundred → **S**

Round 332 to the nearest hundred → **D**

Round 839 to the nearest hundred → **I**

Scratch space:

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

We have emeralds to share. We divide them into equal piles for the team.

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:

$28 \div 4 = \boxed{}$

$120 \div 12 = \boxed{}$

$24 \div 12 = \boxed{}$

$3 \div 1 = \boxed{}$

$36 \div 9 = \boxed{}$

$120 \div 10 = \boxed{}$

$80 \div 10 = \boxed{}$

$99 \div 11 = \boxed{}$

$1 \div 1 = \boxed{}$

$30 \div 5 = \boxed{}$

$25 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain throws an ender pearl, then eats a golden apple.
2. The villain blasts a stone wall, then eats a golden apple.
3. The villain throws an ender pearl, then whistles for a pet wolf.
4. The villain builds a tall tower, then pours a water bucket.
5. The villain flies over the trees, then pours a water bucket.
6. The villain flies over the trees, then places a redstone wire.
7. The villain flies over the trees, then throws a splash potion.
8. The villain builds a tall tower, then throws a splash potion.
9. The villain digs a tunnel, then places a redstone wire.
10. The villain flies over the trees, then eats a golden apple.
11. The villain builds a tall tower, then eats a golden apple.
12. The villain blasts a stone wall, then throws a splash potion.

Answer Key

The Golden Pickaxe Mystery

Culprit: Alex

Diamond Sword · Golden Apple · Left Handed · Leather Cap · Snowball

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT USE REDSTONE TRAPS"

$137 + 148 = 285$ (T) · $126 + 273 = 399$ (F) · $277 + 219 = 496$ (S) · $205 + 280 = 485$ (E) · $489 + 214 = 703$ (R) · $256 + 428 = 684$ (H) · $114 + 135 = 249$ (N) · $314 + 397 = 711$ (A) · $124 + 273 = 397$ (U) · $294 + 395 = 689$ (O) · $174 + 130 = 304$ (I) · $252 + 259 = 511$ (D) · $541 + 243 = 784$ (P)

Clue 2 (Subtraction): "THE BAD CRAFTER IS LEFT HANDED"

$907 - 325 = 582$ (T) · $669 - 104 = 565$ (B) · $677 - 217 = 460$ (D) · $437 - 201 = 236$ (C) · $1014 - 155 = 859$ (N) · $892 - 299 = 593$ (R) · $998 - 170 = 828$ (S) · $1024 - 136 = 888$ (H) · $605 - 159 = 446$ (E) · $773 - 321 = 452$ (A) · $1042 - 304 = 738$ (I) · $523 - 93 = 430$ (F) · $990 - 300 = 690$ (L)

Clue 3 (Multiplication facts (1-12)): "THE VILLAIN RAN FROM SNOWBALLS"

$7 \times 7 = 49$ (T) · $1 \times 1 = 1$ (H) · $6 \times 1 = 6$ (S) · $6 \times 12 = 72$ (A) · $7 \times 10 = 70$ (O) · $7 \times 12 = 84$ (L) · $8 \times 6 = 48$ (R) · $11 \times 5 = 55$ (E) · $3 \times 12 = 36$ (V) · $10 \times 8 = 80$ (F) · $7 \times 8 = 56$ (I) · $11 \times 10 = 110$ (N) · $5 \times 6 = 30$ (W) · $6 \times 9 = 54$ (B) · $12 \times 11 = 132$ (M)

Clue 4 (Rounding): "WE FOUND A LEATHER CAP AT THE SITE"

Round 4,651 to the nearest thousand = 5000 (W) · Round 3,127 to the nearest thousand = 3000 (E) · Round 28 to the nearest ten = 30 (N) · Round 54 to the nearest ten = 50 (R) · Round 7,725 to the nearest thousand = 8000 (T) · Round 213 to the nearest hundred = 200 (H) · Round 18 to the nearest ten = 20 (P) · Round 630 to the nearest hundred = 600 (C) · Round 37 to the nearest ten = 40 (O) · Round 77 to the nearest ten = 80 (U) · Round 59 to the nearest ten = 60 (A) · Round 9,355 to the nearest thousand = 9000 (L) · Round 7,067 to the nearest thousand = 7000 (F) · Round 518 to the nearest hundred = 500 (S) · Round 332 to the nearest hundred = 300 (D) · Round 839 to the nearest hundred = 800 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Alex

$28 \div 4 = 7$ · $120 \div 12 = 10$ · $24 \div 12 = 2$ · $3 \div 1 = 3$ · $36 \div 9 = 4$ · $120 \div 10 = 12$ · $80 \div 10 = 8$ · $99 \div 11 = 9$ · $1 \div 1 = 1$ · $30 \div 5 = 6$ · $25 \div 5 = 5$