The Case of the Missing Diamond Pickaxe

Grade 1 math · Addition, Subtraction, Multiplication, Skip counting, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone snuck into the craft house and took the glowing diamond pickaxe! Check the clues, solve the math, and catch the thief.

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

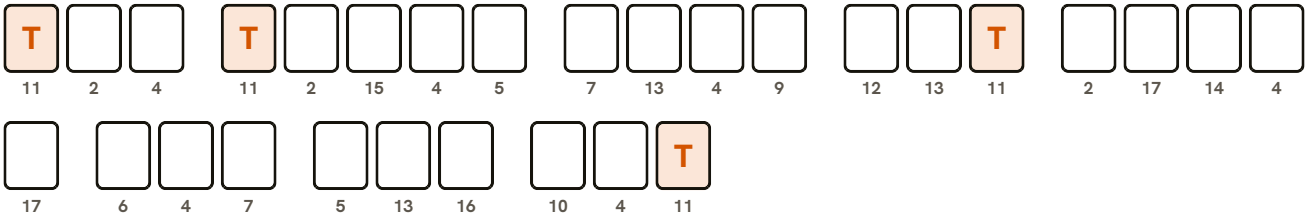
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	BLOCK TOOL	PET COMPANION	FOOTPRINT TYPE	HELMET COLOR	DISTRACTION ITEM
Ethan	Bow and Arrow	Black Cat	Round Boots	Blue Helmet	Golden Apple
Leo	Netherite Hoe	Spotted Ocelot	Square Boots	Red Helmet	Sweet Berries
Milo	Bow and Arrow	Tamed Wolf	Round Boots	Blue Helmet	Sweet Berries
Ruby	Stone Axe	Red Fox	Round Boots	Blue Helmet	Golden Apple
Luke	Bow and Arrow	Green Parrot	Square Boots	Green Helmet	Golden Apple
Maya	Stone Axe	Red Fox	Square Boots	Red Helmet	Golden Apple
Steve	Stone Axe	Tamed Wolf	Square Boots	Red Helmet	Sweet Berries
Zoe	Gold Sword	Green Parrot	Square Boots	Green Helmet	Sweet Berries
Mason	Stone Axe	Spotted Ocelot	Round Boots	Green Helmet	Cooked Fish
Lily	Stone Axe	Tamed Wolf	Square Boots	Green Helmet	Sweet Berries
Alex	Stone Axe	Spotted Ocelot	Round Boots	Blue Helmet	Sweet Berries
Nora	Stone Axe	Tamed Wolf	Round Boots	Blue Helmet	Cooked Fish
Ava	Netherite Hoe	Black Cat	Square Boots	Green Helmet	Sweet Berries
Chloe	Stone Axe	Red Fox	Square Boots	Green Helmet	Sweet Berries
Owen	Bow and Arrow	Green Parrot	Round Boots	Green Helmet	Sweet Berries
Ivy	Netherite Hoe	Spotted Ocelot	Square Boots	Green Helmet	Sweet Berries
Ella	Gold Sword	Tamed Wolf	Round Boots	Blue Helmet	Golden Apple
Noah	Stone Axe	Black Cat	Round Boots	Blue Helmet	Cooked Fish
Finn	Stone Axe	Red Fox	Square Boots	Blue Helmet	Cooked Fish
Eli	Bow and Arrow	Tamed Wolf	Square Boots	Blue Helmet	Cooked Fish
Sam	Bow and Arrow	Black Cat	Round Boots	Blue Helmet	Sweet Berries

CLUE 1 Addition

We count all the torches in the chest to find a lead.

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



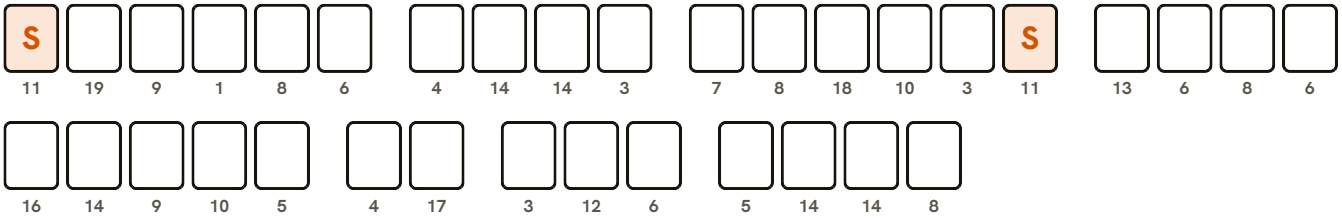
7 + 4 = ☐ → T	6 + 3 = ☐ → S	2 + 5 = ☐ → D	10 + 7 = ☐ → A
1 + 1 = ☐ → H	3 + 9 = ☐ → N	2 + 2 = ☐ → E	6 + 4 = ☐ → P
4 + 2 = ☐ → R	2 + 3 = ☐ → F	6 + 10 = ☐ → X	6 + 8 = ☐ → V
3 + 10 = ☐ → O	7 + 8 = ☐ → I		

Scratch space:

CLUE 2 Subtraction

We see how many oak logs remain in the stack.

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



17 - 6 = ☐ → S	14 - 8 = ☐ → E	14 - 2 = ☐ → H	
19 - 1 = ☐ → I	18 - 2 = ☐ → F	20 - 1 = ☐ → Q	
20 - 6 = ☐ → O	12 - 3 = ☐ → U	6 - 2 = ☐ → B	6 - 1 = ☐ → D
12 - 5 = ☐ → P	16 - 6 = ☐ → N	19 - 2 = ☐ → Y	
15 - 2 = ☐ → W	8 - 7 = ☐ → A	6 - 3 = ☐ → T	9 - 1 = ☐ → R

Scratch space:

CLUE 3 Multiplication facts (1-12)

We inspect rows of redstone lamps on the wall.

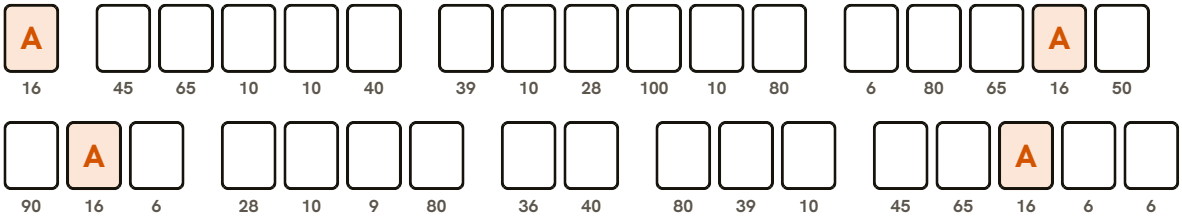
Solve each problem, then write its letter in every clue box that shows the same number.

| T | | | T | | |

CLUE 4 Skip counting

We count emerald gems by twos along the trail.

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



Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 ☐ → A

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → E

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 ☐ → T

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 ☐ → L

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → S

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 ☐ → H

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → G

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 ☐ → M

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 ☐ → I

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 ☐ → W

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 ☐ → R

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 ☐ → P

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → F

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, ___, 45, 50 ☐ → **N**

Scratch space:

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

> We split the loaves of bread into equal boxes.

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:

132 ÷ 12 = ☐ | 28 ÷ 7 = ☐ | 63 ÷ 7 = ☐ | 7 ÷ 7 = ☐ | 84 ÷ 7 = ☐

40 ÷ 4 = ☐ | 32 ÷ 4 = ☐ | 10 ÷ 2 = ☐ | 42 ÷ 6 = ☐ | 36 ÷ 12 = ☐

36 ÷ 6 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain shoots a bow and arrow, then feeds a green parrot.
2. The villain farms with a netherite hoe, then pets a black cat.
3. The villain shoots a bow and arrow, then tames a spotted ocelot.
4. The villain swings a gold sword, then feeds a green parrot.
5. The villain shoots a bow and arrow, then whistles to a tamed wolf.
6. The villain digs with an iron shovel, then pets a black cat.
7. The villain swings a gold sword, then pets a black cat.
8. The villain chops with a stone axe, then pets a black cat.
9. The villain chops with a stone axe, then whistles to a tamed wolf.
10. The villain swings a gold sword, then tames a spotted ocelot.
11. The villain farms with a netherite hoe, then tames a spotted ocelot.
12. The villain digs with an iron shovel, then plays with a red fox.

TEACHER / PARENT

Answer Key

The Case of the Missing Diamond Pickaxe

Culprit: Ava

Netherite Hoe · Black Cat · Square Boots · Green Helmet · Sweet Berries

Trail: Start 21 → Clue 1 17 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT HAVE A RED FOX PET"

7 + 4 = 11 (T) · 6 + 3 = 9 (S) · 2 + 5 = 7 (D) · 10 + 7 = 17 (A) · 1 + 1 = 2 (H) · 3 + 9 = 12 (N) · 2 + 2 = 4 (E) · 6 + 4 = 10 (P) · 4 + 2 = 6 (R) · 2 + 3 = 5 (F) · 6 + 10 = 16 (X) · 6 + 8 = 14 (V) · 3 + 10 = 13 (O) · 7 + 8 = 15 (I)

Clue 2 (Subtraction): "SQUARE BOOT PRINTS WERE FOUND BY THE DOOR"

17 - 6 = 11 (S) · 14 - 8 = 6 (E) · 14 - 2 = 12 (H) · 19 - 1 = 18 (I) · 18 - 2 = 16 (F) · 20 - 1 = 19 (Q) · 20 - 6 = 14 (O) · 12 - 3 = 9 (U) · 6 - 2 = 4 (B) · 6 - 1 = 5 (D) · 12 - 5 = 7 (P) · 16 - 6 = 10 (N) · 19 - 2 = 17 (Y) · 15 - 2 = 13 (W) · 8 - 7 = 1 (A) · 6 - 3 = 3 (T) · 9 - 1 = 8 (R)

Clue 3 (Multiplication facts (1-12)): "THE THIEF DROPPED SWEET BERRIES"

4 × 8 = 32 (T) · 10 × 5 = 50 (F) · 2 × 9 = 18 (W) · 7 × 5 = 35 (H) · 9 × 9 = 81 (D) · 6 × 9 = 54 (E) · 7 × 10 = 70 (O) · 8 × 1 = 8 (I) · 3 × 2 = 6 (B) · 10 × 1 = 10 (S) · 11 × 9 = 99 (P) · 5 × 6 = 30 (R)

Clue 4 (Skip counting): "A GREEN HELMET STRAP WAS LEFT IN THE GRASS"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 = 16 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 = 80 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (L) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 = 39 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 = 100 (M) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (P) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, ___, 45, 50 = 40 (N)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Ava

132 ÷ 12 = 11 · 28 ÷ 7 = 4 · 63 ÷ 7 = 9 · 7 ÷ 7 = 1 · 84 ÷ 7 = 12 · 40 ÷ 4 = 10 · 32 ÷ 4 = 8 · 10 ÷ 2 = 5 · 42 ÷ 6 = 7 · 36 ÷ 12 = 3 · 36 ÷ 6 = 6