The Secret of Sunstone Valley

Grade 3 math · Rounding, Skip counting, Bar models, Multi-step word problems, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A sneaky bandit slipped into the campsite at midnight and took the rare artifact!

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 Temple Rogue is _____

Possible suspects

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

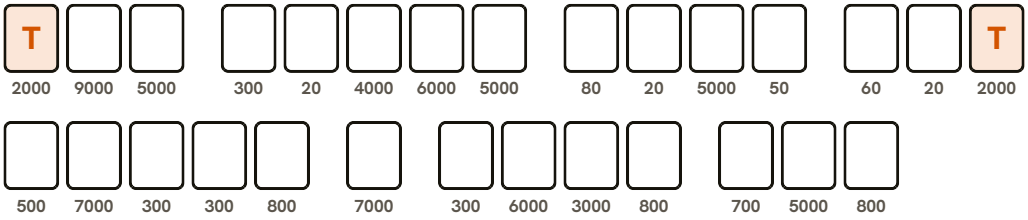
NAME	MAIN TOOL	LOOT ITEM	DOMINANT HAND	HAIR STYLE	WEAKNESS
Grace	Rope Launcher	Crystal Skull	Right Handed	Short Hair	Bright Light
Milo	Rope Launcher	Ruby Key	Right Handed	Short Hair	Bright Light
Ben	Glider Wings	Crystal Skull	Right Handed	Short Hair	Loud Whistle
Aria	Compass Watch	Crystal Skull	Right Handed	Braided Hair	Sticky Mud
Maya	Compass Watch	Stone Compass	Left Handed	Short Hair	Bright Light
Owen	Glider Wings	Stone Compass	Right Handed	Short Hair	Bright Light
Luke	Rope Launcher	Ruby Key	Left Handed	Curly Hair	Bright Light
Nora	Grappling Hook	Ruby Key	Left Handed	Short Hair	Loud Whistle
Eli	Compass Watch	Crystal Skull	Left Handed	Short Hair	Loud Whistle
Ella	Compass Watch	Map Scroll	Right Handed	Short Hair	Bright Light
Ruby	Flash Lantern	Golden Idol	Right Handed	Braided Hair	Bright Light
Mia	Rope Launcher	Stone Compass	Right Handed	Short Hair	Bright Light
Ivy	Glider Wings	Golden Idol	Right Handed	Short Hair	Sticky Mud
Kai	Glider Wings	Crystal Skull	Left Handed	Curly Hair	Loud Whistle
Ava	Glider Wings	Crystal Skull	Right Handed	Braided Hair	Bright Light
Finn	Rope Launcher	Ruby Key	Right Handed	Short Hair	Sticky Mud
Lily	Rope Launcher	Map Scroll	Right Handed	Short Hair	Loud Whistle
Zoe	Rope Launcher	Stone Compass	Left Handed	Short Hair	Bright Light
Leo	Glider Wings	Ruby Key	Right Handed	Curly Hair	Loud Whistle
Liam	Flash Lantern	Crystal Skull	Left Handed	Curly Hair	Bright Light
Jack	Glider Wings	Stone Compass	Right Handed	Curly Hair	Bright Light

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CLUE 1 Rounding

The expedition scanner rounds distance values to the nearest ten.

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



Round 2,290 to the nearest thousand ☐ → T

Round 781 to the nearest hundred ☐ → Y

Round 53 to the nearest ten ☐ → S

Round 83 to the nearest ten ☐ → D

Round 6,214 to the nearest thousand ☐ → U

Round 667 to the nearest hundred ☐ → K

Round 456 to the nearest hundred ☐ → C

Round 7,091 to the nearest thousand ☐ → A

Round 18 to the nearest ten ☐ → O

Round 3,305 to the nearest thousand ☐ → B

Round 8,562 to the nearest thousand ☐ → H

Round 312 to the nearest hundred ☐ → R

Round 3,803 to the nearest thousand ☐ → G

Round 56 to the nearest ten ☐ → N

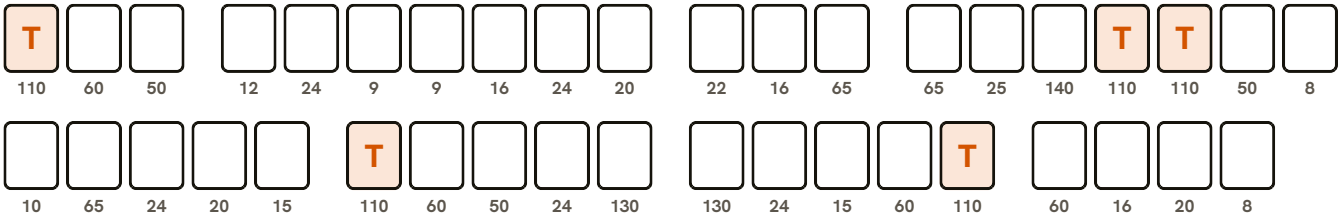
Round 4,587 to the nearest thousand ☐ → E

Scratch space:

CLUE 2 Skip counting

The ranger counts footprints along the trail by skip counting.

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



Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 ☐ → **T**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → **D**

Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 ☐ → **G**

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, 10, 12, 14, 16, 18, ___, 22, 24 ☐ → **N**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 ☐ → **V**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 ☐ → **H**

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 ☐ → **O**

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 ☐ → **R**

Scratch space:

CLUE 3 Bar model word problems

The mapmaker draws bar models to compare supply crates.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with

B											
53	17	6	56	30	34		36	6	56	30	34

.

Scout has 212 lanterns, packed 4 to a bag. How many bags can be filled?

draw a bar model

Answer: ☐ → B

Scout has 8 times as many trail maps as a teammate. The teammate has 7 trail maps. How many trail maps does scout have?

draw a bar model

Answer: ☐ → G

Scout shares 240 canteen cups equally among 8 teams. How many canteen cups does each team get?

draw a bar model

Answer: ☐ → H

There were 74 compasses in all. 40 compasses were used. How many compasses are left?

draw a bar model

Answer: ☐ → T

One group collected 31 lanterns and another group collected 5 lanterns. How many lanterns in all?

draw a bar model

Answer: ☐ → L

The red team has 51 canteen cups and the blue team has 34 canteen cups. How many more canteen cups does the red team have?

draw a bar model

Answer: ☐ → R

Scout has 72 climbing ropes, packed 12 to a bag. How many bags can be filled?

draw a bar model

Answer: ☐ → I

CLUE 4 Multi-step word problems

The camp director solves word problems to track daily supplies.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A strand of

S									
19	13	32	16	20	13	28	39	16	

hair turned up at the scene.

There were 99 trail maps in all. 4 trail maps were set aside. The rest were shared equally among 5 Exploration Team. How many trail maps did each get?

Answer: ☐ → **S**

Scout collected 27 canteen cups in the morning and 141 canteen cups in the afternoon, then split them equally among 6 Exploration Team. How many canteen cups did each get?

Answer: ☐ → **A**

Scout collected 40 canteen cups in the morning and 8 canteen cups in the afternoon, then split them equally among 3 Exploration Team. How many canteen cups did each get?

Answer: ☐ → **R**

Scout earned 7 lanterns in each of 2 rounds, plus 33 bonus lanterns. Then 15 lanterns were lost. How many lanterns are left?

Answer: ☐ → **O**

There were 157 climbing ropes in all. 17 climbing ropes were set aside. The rest were shared equally among 7 Exploration Team. How many climbing ropes did each get?

Answer: ☐ → **T**

There were 154 lanterns in all. 37 lanterns were set aside. The rest were shared equally among 9 Exploration Team. How many lanterns did each get?

Answer: ☐ → **H**

There were 201 canteen cups in all. 3 Exploration Team used 28 canteen cups each. The other 3 Exploration Team shared the rest equally. How many canteen cups did each of the other Exploration Team get?

Answer: ☐ → **I**

Scratch space:

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

> The team splits discovery badges equally among the scouts.

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:

7 ÷ 1 = ☐	48 ÷ 12 = ☐	36 ÷ 3 = ☐	110 ÷ 10 = ☐	48 ÷ 6 = ☐
18 ÷ 3 = ☐	25 ÷ 5 = ☐	18 ÷ 9 = ☐	12 ÷ 12 = ☐	27 ÷ 3 = ☐
27 ÷ 9 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain shined a flash lantern in the dark, then snatched the map scroll.
2. The villain shined a flash lantern in the dark, then pocketed the crystal skull.
3. The villain soared with glider wings above, then snatched the map scroll.
4. The villain soared with glider wings above, then turned the stone compass.
5. The villain used a grappling hook to climb, then pocketed the crystal skull.
6. The villain fired a rope launcher across, then unlocked with the ruby key.
7. The villain fired a rope launcher across, then turned the stone compass.
8. The villain shined a flash lantern in the dark, then turned the stone compass.
9. The villain fired a rope launcher across, then snatched the map scroll.
10. The villain fired a rope launcher across, then pocketed the crystal skull.
11. The villain used a grappling hook to climb, then unlocked with the ruby key.
12. The villain checked a compass watch to navigate, then snatched the map scroll.

TEACHER / PARENT

Answer Key

The Secret of Sunstone Valley

Culprit: Grace

Rope Launcher · Crystal Skull · Right Handed · Short Hair · Bright Light

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE ROGUE DOES NOT CARRY A RUBY KEY"

Round 2,290 to the nearest thousand = 2000 (T) · Round 781 to the nearest hundred = 800 (Y) · Round 53 to the nearest ten = 50 (S) · Round 83 to the nearest ten = 80 (D) · Round 6,214 to the nearest thousand = 6000 (U) · Round 667 to the nearest hundred = 700 (K) · Round 456 to the nearest hundred = 500 (C) · Round 7,091 to the nearest thousand = 7000 (A) · Round 18 to the nearest ten = 20 (O) · Round 3,305 to the nearest thousand = 3000 (B) · Round 8,562 to the nearest thousand = 9000 (H) · Round 312 to the nearest hundred = 300 (R) · Round 3,803 to the nearest thousand = 4000 (G) · Round 56 to the nearest ten = 60 (N) · Round 4,587 to the nearest thousand = 5000 (E)

Clue 2 (Skip counting): "THE VILLAIN WAS SPOTTED USING THEIR RIGHT HAND"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 = 110 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, ___, 27, 30 = 24 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (D) · Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 = 15 (G) · 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, 10, 12, 14, 16, 18, ___, 22, 24 = 20 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 = 12 (V) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 = 60 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 = 22 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 = 25 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (U) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 = 130 (R)

Clue 3 (Bar model word problems): "BRIGHT LIGHT"

Scout has 212 lanterns, packed 4 to a bag. How many bags can be filled? = 53 (B) · Scout has 8 times as many trail maps as a teammate. The teammate has 7 trail maps. How many trail maps does scout have? = 56 (G) · Scout shares 240 canteen cups equally among 8 teams. How many canteen cups does each team get? = 30 (H) · There were 74 compasses in all. 40 compasses were used. How many compasses are left? = 34 (T) · One group collected 31 lanterns and another group collected 5 lanterns. How many lanterns in all? = 36 (L) · The red team has 51 canteen cups and the blue team has 34 canteen cups. How many more canteen cups does the red team have? = 17 (R) · Scout has 72 climbing ropes, packed 12 to a bag. How many bags can be filled? = 6 (I)

Clue 4 (Multi-step word problems): "SHORT HAIR"

There were 99 trail maps in all. 4 trail maps were set aside. The rest were shared equally among 5 Exploration Team. How many trail maps did each get? = 19 (S) · Scout collected 27 canteen cups in the morning and 141 canteen cups in the afternoon, then split them equally among 6 Exploration Team. How many canteen cups did each get? = 28 (A) · Scout collected 40 canteen cups in the morning and 8 canteen cups in the afternoon, then split them equally among 3 Exploration Team. How many canteen cups did each get? = 16 (R) · Scout earned 7 lanterns in each of 2 rounds, plus 33 bonus lanterns. Then 15 lanterns were lost. How many lanterns are left? = 32 (O) · There were 157 climbing ropes in all. 17 climbing ropes were set aside. The rest were shared equally among 7 Exploration Team. How many climbing ropes did each get? = 20 (T) · There were 154 lanterns in all. 37 lanterns were set aside. The rest were shared equally among 9 Exploration Team. How many lanterns did each get? = 13 (H) · There were 201 canteen cups in all. 3 Exploration Team used 28 canteen cups each. The other 3 Exploration Team shared the rest equally. How many canteen cups did each of the other Exploration Team get? = 39 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Grace

7 ÷ 1 = 7 · 48 ÷ 12 = 4 · 36 ÷ 3 = 12 · 110 ÷ 10 = 11 · 48 ÷ 6 = 8 · 18 ÷ 3 = 6 · 25 ÷ 5 = 5 · 18 ÷ 9 = 2 · 12 ÷ 12 = 1 · 27 ÷ 3 = 9 · 27 ÷ 9 = 3