



The Great Treehouse Heist

Grade 5 math · Fractions of a number, Order of operations, Multiplication, Rounding, Division · Reading level grades 1-2

Detective: _____ Date: _____

Someone took the Golden Walkie-Talkie from the treehouse! We need to find the rogue agent fast. Check the clues and save the day!

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 rogue agent is _____

Possible suspects

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

NAME	FAVORITE GADGET	SECRET SKILL	DECODER PEN COLOR	WIG COLOR	FAVORITE SNACK
Sari	grappling hook	quick dash	red ink	lime green wig	choc chip cookies
Emma	laser pointer	high jump	blue ink	lime green wig	sour gummies
Leo	night goggles	quick dash	red ink	lime green wig	sour gummies
Roy	laser pointer	high jump	red ink	lime green wig	sour gummies
Max	grappling hook	high jump	blue ink	bright blue wig	cheesy popcorn
Otis	spy camera	loud whistle	blue ink	bright blue wig	choc chip cookies
Zoe	grappling hook	fast climb	red ink	neon pink wig	choc chip cookies
Finn	pocket drone	high jump	blue ink	lime green wig	sour gummies
Cody	grappling hook	silent walk	blue ink	neon pink wig	choc chip cookies
Ben	laser pointer	loud whistle	red ink	neon pink wig	cheesy popcorn
Yara	grappling hook	high jump	blue ink	bright blue wig	sour gummies
Amy	spy camera	silent walk	blue ink	bright blue wig	choc chip cookies
Jack	laser pointer	high jump	red ink	neon pink wig	sour gummies
Jake	night goggles	loud whistle	blue ink	bright blue wig	choc chip cookies
Luke	night goggles	high jump	red ink	lime green wig	cheesy popcorn
Toby	laser pointer	fast climb	red ink	lime green wig	sour gummies
Lily	pocket drone	quick dash	red ink	lime green wig	choc chip cookies
Rex	night goggles	loud whistle	red ink	lime green wig	sour gummies
Eli	pocket drone	silent walk	red ink	bright blue wig	sour gummies
Sam	laser pointer	quick dash	red ink	lime green wig	sour gummies
Mia	grappling hook	fast climb	red ink	lime green wig	choc chip cookies

CLUE 1
Fractions of a number

We found a box of decoder cards. Only some of them are marked. Find the fraction to unlock the first clue.

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

T								T							T				
37	33	27	26	8	27	38	37	19	36	27	23	38	36	37	33	26	13	27	

								T			
26	30	36	21	19	32	33	35	23	37	30	27

$1/4 \text{ of } 148 = \square \rightarrow \text{ T }$

$4/5 \text{ of } 40 = \square \rightarrow \text{ W }$

$2/6 \text{ of } 108 = \square \rightarrow \text{ O }$

$1/2 \text{ of } 38 = \square \rightarrow \text{ D }$

$1/5 \text{ of } 65 = \square \rightarrow \text{ V }$

$5/10 \text{ of } 60 = \square \rightarrow \text{ L }$

$1/5 \text{ of } 175 = \square \rightarrow \text{ I }$

$3/6 \text{ of } 66 = \square \rightarrow \text{ H }$

$1/3 \text{ of } 63 = \square \rightarrow \text{ U }$

$3/6 \text{ of } 52 = \square \rightarrow \text{ A }$

$1/2 \text{ of } 76 = \square \rightarrow \text{ N }$

$4/10 \text{ of } 20 = \square \rightarrow \text{ G }$

$1/2 \text{ of } 46 = \square \rightarrow \text{ S }$

$1/3 \text{ of } 81 = \square \rightarrow \text{ E }$

Scratch space:

CLUE 2

Order of operations

The spy safe has a big lock. We must solve the steps in the right order to open it.

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

T							T				T					
37	43	7	21	10	7	70	37	33	7	31	37	70	32	37	7	65
72	7	9	44	70	75											

$9 + 7 \times 4 = \boxed{} \rightarrow \boxed{T}$

$6 \times 11 - 1 = \boxed{} \rightarrow \boxed{S}$

$32 + 6 \times 2 = \boxed{} \rightarrow \boxed{I}$

$4 + 9 \times 3 = \boxed{} \rightarrow \boxed{F}$

$7 \times 12 - 12 = \boxed{} \rightarrow \boxed{R}$

$6 \times 6 - 29 = \boxed{} \rightarrow \boxed{E}$

$11 + 8 \times 8 = \boxed{} \rightarrow \boxed{K}$

$5 \times 9 - 12 = \boxed{} \rightarrow \boxed{L}$

$6 \times 5 - 21 = \boxed{} \rightarrow \boxed{D}$

$2 + 2 \times 4 = \boxed{} \rightarrow \boxed{G}$

$11 \times 7 - 7 = \boxed{} \rightarrow \boxed{N}$

$9 + 2 \times 6 = \boxed{} \rightarrow \boxed{A}$

$12 + 4 \times 5 = \boxed{} \rightarrow \boxed{O}$

$8 \times 8 - 21 = \boxed{} \rightarrow \boxed{H}$

Scratch space:

CLUE 3

Multiplication facts (1-12)

There are neat rows of supply boots in the closet. Counting them up will give us the next hint.

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

S																S
21	121	10	55	7	10	30	30	1	72	55	16	144	144	25	55	21

72	25	55	25	121	100	70	45	25	84	60	121	121	55

$7 \times 3 = \square \rightarrow \text{S}$

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

$10 \times 3 = \square \rightarrow \text{M}$

$11 \times 11 = \square \rightarrow \text{O}$

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

$12 \times 12 = \square \rightarrow \text{P}$

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

$9 \times 5 = \square \rightarrow \text{H}$

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

$10 \times 1 = \square \rightarrow \text{U}$

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

$4 \times 4 = \square \rightarrow \text{A}$

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

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

$1 \times 7 = \square \rightarrow \text{G}$

$6 \times 10 = \square \rightarrow \text{L}$

Scratch space:

CLUE 4
Rounding

Our radar screen is blurry. It only shows the closest rounded numbers to track the path.

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

W																
430	50	300	70	7000	2900	290	9000	3000	1300	30	50	110	500	50	50	2900

130	2000	500	9000	2900	290

Round 434 to the nearest ten → **W**

Round 8,806 to the nearest thousand → **A**

Round 70 to the nearest ten → **O**

Round 1,332 to the nearest hundred → **I**

Round 2,931 to the nearest hundred → **N**

Round 53 to the nearest ten → **E**

Round 106 to the nearest ten → **G**

Round 313 to the nearest hundred → **F**

Round 130 to the nearest ten → **S**

Round 488 to the nearest hundred → **R**

Round 7,359 to the nearest thousand → **U**

Round 292 to the nearest ten → **D**

Round 2,153 to the nearest thousand → **T**

Round 2,886 to the nearest thousand → **L**

Round 28 to the nearest ten → **M**

Scratch space:

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

We need to share the spy badges equally among the team to get our final lead.

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:

$80 \div 8 = \boxed{}$

$108 \div 12 = \boxed{}$

$36 \div 12 = \boxed{}$

$72 \div 9 = \boxed{}$

$30 \div 5 = \boxed{}$

$7 \div 7 = \boxed{}$

$63 \div 9 = \boxed{}$

$5 \div 1 = \boxed{}$

$84 \div 7 = \boxed{}$

$12 \div 3 = \boxed{}$

$99 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain launched a pocket drone, then made a fast climb.
2. The villain shined a laser pointer, then did a quick dash.
3. The villain adjusted some night goggles, then did a quick dash.
4. The villain snapped a spy camera, then blew a loud whistle.
5. The villain adjusted some night goggles, then made a fast climb.
6. The villain launched a pocket drone, then did a quick dash.
7. The villain threw a grappling hook, then made a fast climb.
8. The villain shined a laser pointer, then blew a loud whistle.
9. The villain shined a laser pointer, then made a fast climb.
10. The villain shined a laser pointer, then made a high jump.
11. The villain snapped a spy camera, then used a silent walk.
12. The villain adjusted some night goggles, then made a high jump.

Answer Key

The Great Treehouse Heist

Culprit: Sam

laser pointer · quick dash · red ink · lime green wig · sour gummies

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE AGENT DOES NOT HAVE A LOUD WHISTLE"

$\frac{1}{4}$ of 148 = 37 (T) · $\frac{4}{5}$ of 40 = 32 (W) · $\frac{2}{6}$ of 108 = 36 (O) · $\frac{1}{2}$ of 38 = 19 (D) · $\frac{1}{5}$ of 65 = 13 (V) · $\frac{5}{10}$ of 60 = 30 (L) · $\frac{1}{5}$ of 175 = 35 (I) · $\frac{3}{6}$ of 66 = 33 (H) · $\frac{1}{3}$ of 63 = 21 (U) · $\frac{3}{6}$ of 52 = 26 (A) · $\frac{1}{2}$ of 76 = 38 (N) · $\frac{4}{10}$ of 20 = 8 (G) · $\frac{1}{2}$ of 46 = 23 (S) · $\frac{1}{3}$ of 81 = 27 (E)

Clue 2 (Order of operations): "THE AGENT LEFT NOTES IN RED INK"

$9 + 7 \times 4 = 37$ (T) · $6 \times 11 - 1 = 65$ (S) · $32 + 6 \times 2 = 44$ (I) · $4 + 9 \times 3 = 31$ (F) · $7 \times 12 - 12 = 72$ (R) · $6 \times 6 - 29 = 7$ (E) · $11 + 8 \times 8 = 75$ (K) · $5 \times 9 - 12 = 33$ (L) · $6 \times 5 - 21 = 9$ (D) · $2 + 2 \times 4 = 10$ (G) · $11 \times 7 - 7 = 70$ (N) · $9 + 2 \times 6 = 21$ (A) · $12 + 4 \times 5 = 32$ (O) · $8 \times 8 - 21 = 43$ (H)

Clue 3 (Multiplication facts (1-12)): "SOUR GUMMY WRAPPERS WERE ON THE FLOOR"

$7 \times 3 = 21$ (S) · $11 \times 5 = 55$ (R) · $10 \times 3 = 30$ (M) · $11 \times 11 = 121$ (O) · $10 \times 10 = 100$ (N) · $12 \times 12 = 144$ (P) · $12 \times 6 = 72$ (W) · $9 \times 5 = 45$ (H) · $7 \times 12 = 84$ (F) · $10 \times 1 = 10$ (U) · $10 \times 7 = 70$ (T) · $4 \times 4 = 16$ (A) · $1 \times 1 = 1$ (Y) · $5 \times 5 = 25$ (E) · $1 \times 7 = 7$ (G) · $6 \times 10 = 60$ (L)

Clue 4 (Rounding): "WE FOUND A LIME GREEN STRAND"

Round 434 to the nearest ten = 430 (W) · Round 8,806 to the nearest thousand = 9000 (A) · Round 70 to the nearest ten = 70 (O) · Round 1,332 to the nearest hundred = 1300 (I) · Round 2,931 to the nearest hundred = 2900 (N) · Round 53 to the nearest ten = 50 (E) · Round 106 to the nearest ten = 110 (G) · Round 313 to the nearest hundred = 300 (F) · Round 130 to the nearest ten = 130 (S) · Round 488 to the nearest hundred = 500 (R) · Round 7,359 to the nearest thousand = 7000 (U) · Round 292 to the nearest ten = 290 (D) · Round 2,153 to the nearest thousand = 2000 (T) · Round 2,886 to the nearest thousand = 3000 (L) · Round 28 to the nearest ten = 30 (M)

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

$80 \div 8 = 10$ · $108 \div 12 = 9$ · $36 \div 12 = 3$ · $72 \div 9 = 8$ · $30 \div 5 = 6$ · $7 \div 7 = 1$ · $63 \div 9 = 7$ · $5 \div 1 = 5$ · $84 \div 7 = 12$ · $12 \div 3 = 4$ · $99 \div 9 = 11$