The Mystery of the Temple Cat Burglar

Grade 5 math · Fractions of a number, Word problems, Multi-step word problems, Order of operations · Reading level grades 5-6

Detective: _____ **Date:** _____

During an excavation at the Tomb of Bastet, a mysterious bandit broke into the inner sanctum and swiped an ancient artifact! The local stray cats saw everything, but you will need to decode the hieroglyphics and gather evidence to find out which suspect is responsible.

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 Tomb Bandit is _____

Possible suspects

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

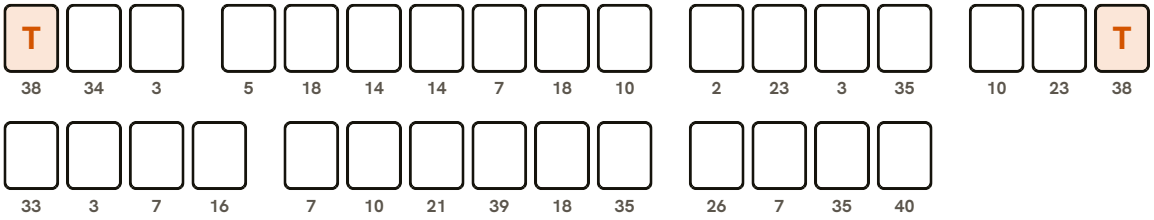
NAME	SACRED RELIC	HIEROGLYPH MASK	DOMINANT PAW	FUR PATTERN	DISTRACTION
Sandy	Golden Scarab	Falcon Mask	Left Handed	Tabby Stripes	Dried Fish
Whiskers	Golden Scarab	Jackal Mask	Right Handed	Sleek Black	Dried Fish
Felix	Sun Scepter	Jackal Mask	Left Handed	Sleek Black	Dried Fish
Barnaby	Lapis Collar	Falcon Mask	Left Handed	Tabby Stripes	Dried Fish
Khufu	Fish Statue	Cobra Mask	Left Handed	Sleek Black	Laser Light
Mittens	Fish Statue	Ibis Mask	Left Handed	Tabby Stripes	Catnip Toy
Thoth	Sun Scepter	Ibis Mask	Right Handed	Tabby Stripes	Dried Fish
Bastet	Fish Statue	Ibis Mask	Right Handed	Tabby Stripes	Laser Light
Cleopatra	Ankh Amulet	Ibis Mask	Left Handed	Tabby Stripes	Laser Light
Anubis	Sun Scepter	Jackal Mask	Right Handed	Calico Pattern	Laser Light
Tutankhamun	Sun Scepter	Falcon Mask	Left Handed	Tabby Stripes	Laser Light
Purrser	Lapis Collar	Falcon Mask	Left Handed	Calico Pattern	Catnip Toy
Nefertiti	Lapis Collar	Ibis Mask	Left Handed	Tabby Stripes	Catnip Toy
Clawdia	Ankh Amulet	Jackal Mask	Right Handed	Tabby Stripes	Laser Light
Sphinxie	Golden Scarab	Falcon Mask	Right Handed	Tabby Stripes	Laser Light
Hatshepsut	Sun Scepter	Cobra Mask	Left Handed	Tabby Stripes	Dried Fish
Sekhmet	Lapis Collar	Falcon Mask	Right Handed	Sleek Black	Laser Light
Pawtra	Ankh Amulet	Falcon Mask	Right Handed	Tabby Stripes	Laser Light
Meowses	Golden Scarab	Anubis Mask	Left Handed	Tabby Stripes	Laser Light
Shadow	Sun Scepter	Jackal Mask	Left Handed	Tabby Stripes	Laser Light
Ramesses	Sun Scepter	Anubis Mask	Right Handed	Tabby Stripes	Laser Light

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CLUE 1 Fractions of a number

You inspect the dusty temple doorway. Decoding two carved panels of glyphs reveals a missing artifact clue.

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



2/4 of 76 = ☐ → T

1/2 of 46 = ☐ → O

3/8 of 8 = ☐ → E

3/6 of 10 = ☐ → V

5/10 of 4 = ☐ → D

2/6 of 117 = ☐ → B

1/2 of 20 = ☐ → N

3/6 of 68 = ☐ → H

3/5 of 30 = ☐ → I

3/6 of 28 = ☐ → L

7/8 of 8 = ☐ → A

2/6 of 48 = ☐ → R

1/5 of 200 = ☐ → K

2/6 of 78 = ☐ → M

2/6 of 99 = ☐ → W

2/4 of 70 = ☐ → S

3/10 of 70 = ☐ → U

Scratch space:

CLUE 2 Word problems

A friendly stray cat leads you to a secret side chamber where written notes yield a vital clue.

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

A witness saw the villain was

R								D	E	D
66	11	9	96	94	96	13	86			

.

Archaeologist lined up 11 rows of 6 cat statues. How many cat statues in all?

Answer: ☐ → R

Archaeologist found 4 papyrus scrolls yesterday and 5 more today. How many papyrus scrolls in all?

Answer: ☐ → G

Archaeologist found 58 cat statues yesterday and 28 more today. How many cat statues in all?

Answer: ☐ → N

There were 18 cat statues. 7 were used up. How many cat statues are left?

Answer: ☐ → I

Archaeologist found 24 cat statues yesterday and 72 more today. How many cat statues in all?

Answer: ☐ → H

There were 119 clay scarabs. 25 were used up. How many clay scarabs are left?

Answer: ☐ → T

Archaeologist found 5 hieroglyph tiles yesterday and 8 more today. How many hieroglyph tiles in all?

Answer: ☐ → A

Scratch space:

CLUE 3 Multi-step word problems

Only three tenths of the tomb wall murals remain unsmudged, pointing to a clue about the thief.

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

Someone scared the villain off with

L					L			H	T
19	83	36	63	21	19	24	23		

.

Archaeologist earned 5 hieroglyph tiles in each of 2 rounds, plus 15 bonus hieroglyph tiles. Then 6 hieroglyph tiles were lost. How many hieroglyph tiles are left?

Answer: ☐ → **L**

Archaeologist earned 2 cat statues in each of 3 rounds, plus 79 bonus cat statues. Then 2 cat statues were lost. How many cat statues are left?

Answer: ☐ → **A**

Archaeologist collected 50 hieroglyph tiles in the morning and 70 hieroglyph tiles in the afternoon, then split them equally among 5 tomb expedition. How many hieroglyph tiles did each get?

Answer: ☐ → **I**

There were 415 cat statues in all. 4 tomb expedition used 25 cat statues each. The other 5 tomb expedition shared the rest equally. How many cat statues did each of the other tomb expedition get?

Answer: ☐ → **E**

There were 177 cat statues in all. 2 tomb expedition used 31 cat statues each. The other 5 tomb expedition shared the rest equally. How many cat statues did each of the other tomb expedition get?

Answer: ☐ → **G**

Archaeologist filled 4 boxes with 6 clay scarabs each, then found 12 more clay scarabs. How many clay scarabs are there in all?

Answer: ☐ → **S**

There were 77 cat statues in all. 35 cat statues were set aside. The rest were shared equally among 2 tomb expedition. How many cat statues did each get?

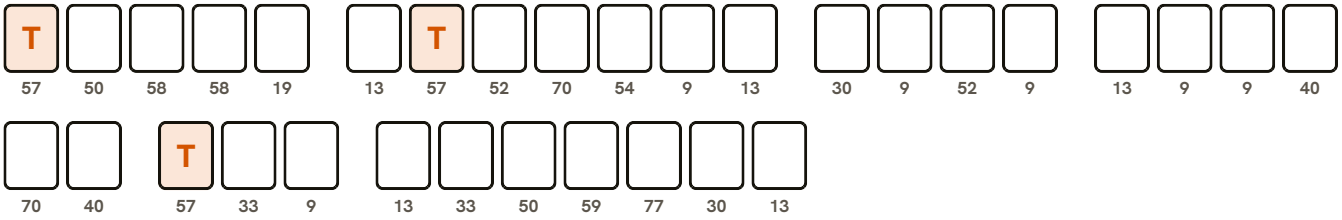
Answer: ☐ → **R**

Scratch space:

CLUE 4 Order of operations

By solving the sequence of ancient number seals on the stone slab, a hidden compartment unlocks.

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



30 + 9 × 3 = ☐ → T

8 × 9 - 18 = ☐ → P

8 × 8 - 6 = ☐ → B

13 + 4 × 5 = ☐ → H

12 × 4 - 8 = ☐ → N

23 + 3 × 9 = ☐ → A

3 × 11 - 20 = ☐ → S

27 + 5 × 5 = ☐ → R

6 × 11 - 7 = ☐ → D

8 × 6 - 29 = ☐ → Y

49 + 4 × 7 = ☐ → O

40 + 6 × 5 = ☐ → I

3 + 9 × 3 = ☐ → W

6 × 6 - 27 = ☐ → E

Scratch space:

CLUE 5 Fractions of a number - the last clue

> The museum curator calculates that three fourths of the recovered papyrus scroll contains suspect details.

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:

4/8 of 4 = ☐	3/6 of 22 = ☐	4/5 of 5 = ☐	5/10 of 16 = ☐
1/6 of 42 = ☐	4/8 of 18 = ☐	6/10 of 20 = ☐	6/8 of 4 = ☐
1/8 of 48 = ☐	1/6 of 60 = ☐	2/8 of 20 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain snatched the ankh amulet, then slapped on a jackal mask.
2. The villain snatched the ankh amulet, then put on a falcon mask.
3. The villain grabbed the sun scepter, then disguised with an ibis mask.
4. The villain stole the fish statue, then disguised with an ibis mask.
5. The villain pocketed the golden scarab, then donned a cobra mask.
6. The villain swiped the lapis collar, then put on a falcon mask.
7. The villain grabbed the sun scepter, then put on a falcon mask.
8. The villain swiped the lapis collar, then slapped on a jackal mask.
9. The villain pocketed the golden scarab, then disguised with an ibis mask.
10. The villain pocketed the golden scarab, then wore an anubis mask.
11. The villain pocketed the golden scarab, then put on a falcon mask.
12. The villain snatched the ankh amulet, then wore an anubis mask.

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TEACHER / PARENT

Answer Key

The Mystery of the Temple Cat Burglar

Culprit: Clawdia

Ankh Amulet · Jackal Mask · Right Handed · Tabby Stripes · Laser Light

Trail: Start 21 → Clue 1 19 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT WEAR ANUBIS MASK"

2/4 of 76 = 38 (T) · 1/2 of 46 = 23 (O) · 3/8 of 8 = 3 (E) · 3/6 of 10 = 5 (V) · 5/10 of 4 = 2 (D) · 2/6 of 117 = 39 (B) · 1/2 of 20 = 10 (N) · 3/6 of 68 = 34 (H) · 3/5 of 30 = 18 (I) · 3/6 of 28 = 14 (L) · 7/8 of 8 = 7 (A) · 2/6 of 48 = 16 (R) · 1/5 of 200 = 40 (K) · 2/6 of 78 = 26 (M) · 2/6 of 99 = 33 (W) · 2/4 of 70 = 35 (S) · 3/10 of 70 = 21 (U)

Clue 2 (Word problems): "RIGHT HANDED"

Archaeologist lined up 11 rows of 6 cat statues. How many cat statues in all? = 66 (R) · Archaeologist found 4 papyrus scrolls yesterday and 5 more today. How many papyrus scrolls in all? = 9 (G) · Archaeologist found 58 cat statues yesterday and 28 more today. How many cat statues in all? = 86 (N) · There were 18 cat statues. 7 were used up. How many cat statues are left? = 11 (I) · Archaeologist found 24 cat statues yesterday and 72 more today. How many cat statues in all? = 96 (H) · There were 119 clay scarabs. 25 were used up. How many clay scarabs are left? = 94 (T) · Archaeologist found 5 hieroglyph tiles yesterday and 8 more today. How many hieroglyph tiles in all? = 13 (A)

Clue 3 (Multi-step word problems): "LASER LIGHT"

Archaeologist earned 5 hieroglyph tiles in each of 2 rounds, plus 15 bonus hieroglyph tiles. Then 6 hieroglyph tiles were lost. How many hieroglyph tiles are left? = 19 (L) · Archaeologist earned 2 cat statues in each of 3 rounds, plus 79 bonus cat statues. Then 2 cat statues were lost. How many cat statues are left? = 83 (A) · Archaeologist collected 50 hieroglyph tiles in the morning and 70 hieroglyph tiles in the afternoon, then split them equally among 5 tomb expedition. How many hieroglyph tiles did each get? = 24 (I) · There were 415 cat statues in all. 4 tomb expedition used 25 cat statues each. The other 5 tomb expedition shared the rest equally. How many cat statues did each of the other tomb expedition get? = 63 (E) · There were 177 cat statues in all. 2 tomb expedition used 31 cat statues each. The other 5 tomb expedition shared the rest equally. How many cat statues did each of the other tomb expedition get? = 23 (G) · Archaeologist filled 4 boxes with 6 clay scarabs each, then found 12 more clay scarabs. How many clay scarabs are there in all? = 36 (S) · There were 77 cat statues in all. 35 cat statues were set aside. The rest were shared equally among 2 tomb expedition. How many cat statues did each get? = 21 (R)

Clue 4 (Order of operations): "TABBY STRIPES WERE SEEN IN THE SHADOWS"

30 + 9 × 3 = 57 (T) · 8 × 9 - 18 = 54 (P) · 8 × 8 - 6 = 58 (B) · 13 + 4 × 5 = 33 (H) · 12 × 4 - 8 = 40 (N) · 23 + 3 × 9 = 50 (A) · 3 × 11 - 20 = 13 (S) · 27 + 5 × 5 = 52 (R) · 6 × 11 - 7 = 59 (D) · 8 × 6 - 29 = 19 (Y) · 49 + 4 × 7 = 77 (O) · 40 + 6 × 5 = 70 (I) · 3 + 9 × 3 = 30 (W) · 6 × 6 - 27 = 9 (E)

Clue 5 (Fractions of a number): surviving statement is box 1 → Clawdia

4/8 of 4 = 2 · 3/6 of 22 = 11 · 4/5 of 5 = 4 · 5/10 of 16 = 8 · 1/6 of 42 = 7 · 4/8 of 18 = 9 · 6/10 of 20 = 12 · 6/8 of 4 = 3 · 1/8 of 48 = 6 · 1/6 of 60 = 10 · 2/8 of 20 = 5