



The Case of the Missing Golden Skull

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

Detective: _____ Date: _____

Someone snuck into the ship pantry and stole the Golden Skull trophy! Detective Barnaby must collect clues around the deck to find out which pirate took it.

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 Treasure Thief 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	EXTRA GEAR	DOMINANT HAND	LOOK	FEAR
Barnaby Plum	iron anchor	squawking parrot	right handed	red ponytail	loud thunder
Captain Flint	iron anchor	silver hook	left handed	braided beard	tickling feathers
Grace O Malley	heavy compass	ship bell	right handed	black bandana	tickling feathers
Salty Sam	brass telescope	squawking parrot	right handed	red ponytail	tickling feathers
Mary Read	map scroll	squawking parrot	left handed	black bandana	tickling feathers
Edward England	cutlass	bright lantern	left handed	braided beard	loud thunder
John Rackham	map scroll	bright lantern	left handed	red ponytail	tickling feathers
Bartholomew Roberts	brass telescope	bright lantern	left handed	black bandana	tickling feathers
Howell Davis	iron anchor	squawking parrot	right handed	braided beard	tickling feathers
Francois l Olonnais	iron anchor	skull flag	left handed	black bandana	loud thunder
Jean Lafitte	brass telescope	bright lantern	right handed	black bandana	loud thunder
Zheng Yi Sao	brass telescope	skull flag	left handed	black bandana	tickling feathers
Thomas Tew	map scroll	silver hook	left handed	black bandana	tickling feathers
Henry Morgan	map scroll	ship bell	right handed	braided beard	loud thunder
William Dampier	cutlass	squawking parrot	left handed	braided beard	tickling feathers
Samuel Bellamy	heavy compass	silver hook	left handed	black bandana	loud thunder
Anne Bonny	cutlass	silver hook	left handed	braided beard	loud thunder
Blackbeard	brass telescope	ship bell	right handed	black bandana	loud thunder
Calico Jack	map scroll	bright lantern	right handed	braided beard	tickling feathers
Sadie the Goat	iron anchor	ship bell	left handed	red ponytail	bright sunlight
Stede Bonnet	brass telescope	silver hook	left handed	black bandana	tickling feathers

CLUE 1

Quartermaster Sam counts the gold coins left in the chest to see what was taken.

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

Diagram showing two rows of boxes with numbers and the letter T. The top row has 18 boxes, and the bottom row has 12 boxes. The first box in the top row and the third box in the bottom row are highlighted in orange and contain the letter T. The numbers below the boxes are: Top row: 595, 746, 597, 139, 881, 597, 458, 412, 259, 336, 709, 507, 507, 458, 709, 881, 501, 526, 597, 139. Bottom row: 881, 526, 595, 496, 139, 597, 458, 507, 458, 881, 595, 597, 514, 881.

$704 - 109 = \square \rightarrow \boxed{\text{T}}$

$$824 - 227 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$886 - 385 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$837 - 323 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$514 - 56 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$828 - 82 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$604 - 108 = \boxed{} \rightarrow \boxed{\text{U}}$$

$1059 - 350 = \square \rightarrow \boxed{\text{I}}$

$$739 - 327 = \boxed{} \rightarrow \boxed{\text{K}}$$

$817 - 291 = \boxed{} \rightarrow \boxed{0}$

$$1122 - 241 = \boxed{} \rightarrow \boxed{\text{N}}$$

$457 - 198 = \boxed{} \rightarrow \boxed{\text{Y}}$

$886 - 379 = \boxed{} \rightarrow \boxed{\text{L}}$

$499 - 360 = \boxed{} \rightarrow \boxed{\text{S}}$

$339 - 3 = \square \rightarrow \boxed{\mathbf{V}}$

Scratch space:

Multiplication facts (1-12)

Barnaby checks the rows of cannonballs stacked on the deck.

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

36 96 16 30 32 70 70 6 96 16 20 66 36 96 16 25 10 21

55 7 36 96 36 96 16 20 16 42 36 96 10 88 66

$6 \times 6 = \boxed{} \rightarrow \boxed{\text{T}}$

$2 \times 5 = \square \rightarrow \mathbf{A}$

$4 \times 4 = \boxed{} \rightarrow \boxed{\text{E}}$

$$10 \times 7 = \boxed{} \rightarrow \boxed{0}$$

$6 \times 5 = \square \rightarrow \boxed{\text{C}}$

$11 \times 8 = \boxed{} \rightarrow \boxed{\text{N}}$

$$7 \times 1 = \boxed{} \rightarrow \boxed{1}$$

$6 \times 11 = \boxed{} \rightarrow \boxed{\text{D}}$

$7 \times 3 = \boxed{} \rightarrow \boxed{\text{P}}$

$5 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{W}}$

$$8 \times 12 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$5 \times 5 = \boxed{} \rightarrow \boxed{\mathbf{M}}$$

$10 \times 2 = \boxed{} \rightarrow \boxed{\text{L}}$

$6 \times 1 = \boxed{} \rightarrow \boxed{\text{K}}$

$6 \times 7 = \square \rightarrow \boxed{\mathbf{F}}$

$4 \times 8 = \boxed{} \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 3

Word problems

The crew solves simple story problems to figure out supply counts.

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

Someone scared the villain off with

T								F	E	A	T	H	E	R	S
7	18	41	32	78	18	57	30				7				

There were 27 shiny pearls. 20 were used up. How many shiny pearls are left?

Answer: → **T**

Quartermaster Sam found 22 shiny pearls yesterday and 56 more today. How many shiny pearls in all?

Answer: → **L**

Quartermaster Sam lined up 2 rows of 9 cannonballs. How many cannonballs in all?

Answer: → **I**

There were 71 treasure maps. 39 were used up. How many treasure maps are left?

Answer: → **K**

Quartermaster Sam lined up 6 rows of 5 cannonballs. How many cannonballs in all?

Answer: → **G**

Quartermaster Sam found 8 treasure maps yesterday and 33 more today. How many treasure maps in all?

Answer: → **C**

There were 81 treasure maps. 24 were used up. How many treasure maps are left?

Answer: → **N**

Scratch space:

Rounding

The ship spyglass dial rounds numbers to the nearest ten.

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

Diagram illustrating a list of numbers (values) and their corresponding indices (positions) in a sequence. The sequence is represented by two rows of boxes, each containing a value and an index below it. The indices are 1 through 16 for the first row and 17 through 32 for the second row.

Index	Value
1	30
2	200
3	90
4	200
5	9000
6	90
7	5000
8	300
9	200
10	70
11	6000
12	800
13	7000
14	2000
15	30
16	60
17	500
18	600
19	60
20	9000
21	20
22	500
23	60
24	2000
25	30
26	60
27	2000
28	60
29	90
30	3000
31	400
32	200
33	60
34	30

The diagram highlights the values 30 at index 15 and index 34, which are marked with a red 'D'.

Round 33 to the nearest ten $\rightarrow$ **D**

Round 73 to the nearest ten $\rightarrow$ **S**

Round 440 to the nearest hundred $\rightarrow$ **R**

Round 1,565 to the nearest thousand → **N**

Round 6,984 to the nearest thousand $\rightarrow$ **U**

Round 64 to the nearest ten $\rightarrow$ **A**

Round 8,755 to the nearest thousand → **C**

Round 291 to the nearest hundred $\rightarrow$ **V**

Round 5,772 to the nearest thousand → **F**

Round 17 to the nearest ten $\rightarrow$ **K**

Round 4,871 to the nearest thousand $\rightarrow$

Round 500 to the nearest hundred $\rightarrow$ **B**

Round 231 to the nearest hundred → **E**

Round 92 to the nearest ten $\rightarrow$ **T**

Round 799 to the nearest hundred $\rightarrow$

Round 3,248 to the nearest thousand $\rightarrow$ **H**

Round 622 to the nearest hundred → **L**

Scratch space:

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

Captain Coral divides the treasure sacks equally among the guard posts.

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:

$21 \div 7 = \boxed{}$

$14 \div 2 = \boxed{}$

$108 \div 9 = \boxed{}$

$18 \div 2 = \boxed{}$

$32 \div 4 = \boxed{}$

$99 \div 9 = \boxed{}$

$40 \div 10 = \boxed{}$

$48 \div 8 = \boxed{}$

$50 \div 5 = \boxed{}$

$25 \div 5 = \boxed{}$

$6 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain unrolled a map scroll, then whistled to a squawking parrot.
2. The villain unrolled a map scroll, then rang a ship bell.
3. The villain unrolled a map scroll, then waved a silver hook.
4. The villain peered through a brass telescope, then rang a ship bell.
5. The villain dropped an iron anchor, then lit a bright lantern.
6. The villain brandished a cutlass, then waved a silver hook.
7. The villain peered through a brass telescope, then waved a silver hook.
8. The villain unrolled a map scroll, then lit a bright lantern.
9. The villain dropped an iron anchor, then raised a skull flag.
10. The villain brandished a cutlass, then rang a ship bell.
11. The villain brandished a cutlass, then whistled to a squawking parrot.
12. The villain peered through a brass telescope, then raised a skull flag.

Answer Key

The Case of the Missing Golden Skull

Culprit: Mary Read

map scroll · squawking parrot · left handed · black bandana · tickling feathers

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE SNEAKY VILLAIN DOES NOT USE A LANTERN"

$704 - 109 = 595$ (T) · $824 - 227 = 597$ (E) · $886 - 385 = 501$ (D) · $837 - 323 = 514$ (R) · $514 - 56 = 458$ (A) · $828 - 82 = 746$ (H) · $604 - 108 = 496$ (U) · $1059 - 350 = 709$ (I) · $739 - 327 = 412$ (K) · $817 - 291 = 526$ (O) · $1122 - 241 = 881$ (N) · $457 - 198 = 259$ (Y) · $886 - 379 = 507$ (L) · $499 - 360 = 139$ (S) · $339 - 3 = 336$ (V)

Clue 2 (Multiplication facts (1-12)): "THE CROOK HELD THE MAP WITH THE LEFT HAND"

$6 \times 6 = 36$ (T) · $2 \times 5 = 10$ (A) · $4 \times 4 = 16$ (E) · $10 \times 7 = 70$ (O) · $6 \times 5 = 30$ (C) · $11 \times 8 = 88$ (N) · $7 \times 1 = 7$ (I) · $6 \times 11 = 66$ (D) · $7 \times 3 = 21$ (P) · $5 \times 11 = 55$ (W) · $8 \times 12 = 96$ (H) · $5 \times 5 = 25$ (M) · $10 \times 2 = 20$ (L) · $6 \times 1 = 6$ (K) · $6 \times 7 = 42$ (F) · $4 \times 8 = 32$ (R)

Clue 3 (Word problems): "TICKLING FEATHERS"

There were 27 shiny pearls. 20 were used up. How many shiny pearls are left? = 7 (T) · Quartermaster Sam found 22 shiny pearls yesterday and 56 more today. How many shiny pearls in all? = 78 (L) · Quartermaster Sam lined up 2 rows of 9 cannonballs. How many cannonballs in all? = 18 (I) · There were 71 treasure maps. 39 were used up. How many treasure maps are left? = 32 (K) · Quartermaster Sam lined up 6 rows of 5 cannonballs. How many cannonballs in all? = 30 (G) · Quartermaster Sam found 8 treasure maps yesterday and 33 more today. How many treasure maps in all? = 41 (C) · There were 81 treasure maps. 24 were used up. How many treasure maps are left? = 57 (N)

Clue 4 (Rounding): "DETECTIVES FOUND A BLACK BANDANA THREAD"

Round 33 to the nearest ten = 30 (D) · Round 73 to the nearest ten = 70 (S) · Round 440 to the nearest hundred = 400 (R) · Round 1,565 to the nearest thousand = 2000 (N) · Round 6,984 to the nearest thousand = 7000 (U) · Round 64 to the nearest ten = 60 (A) · Round 8,755 to the nearest thousand = 9000 (C) · Round 291 to the nearest hundred = 300 (V) · Round 5,772 to the nearest thousand = 6000 (F) · Round 17 to the nearest ten = 20 (K) · Round 4,871 to the nearest thousand = 5000 (I) · Round 500 to the nearest hundred = 500 (B) · Round 231 to the nearest hundred = 200 (E) · Round 92 to the nearest ten = 90 (T) · Round 799 to the nearest hundred = 800 (O) · Round 3,248 to the nearest thousand = 3000 (H) · Round 622 to the nearest hundred = 600 (L)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → Mary Read

$21 \div 7 = 3$ · $14 \div 2 = 7$ · $108 \div 9 = 12$ · $18 \div 2 = 9$ · $32 \div 4 = 8$ · $99 \div 9 = 11$ · $40 \div 10 = 4$ · $48 \div 8 = 6$ · $50 \div 5 = 10$ · $25 \div 5 = 5$ · $6 \div 3 = 2$