



The Great Shipwreck Cove Heist

Grade 6 math · Percentages, Exponents, Order of operations, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Shiver me timbers! Someone has broken into the Governor's safe at Shipwreck Cove and stolen the legendary Golden Pineapple! The culprit left behind a trail of confusing clues. It is up to you, the smartest cabin boy on the Seven Seas, to solve the puzzles, track down the thief, 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 pirate thief is _____

Possible suspects

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

NAME	SIGNATURE WEAPON	SAILING GEAR	STEERING HAND	BANDANA COLOR	FEAR
Scurvy Sam	Spiked Mace	Leather Boots	Right-Handed	Pitch Black	Loud Thunder
Gunpowder Gabe	Dual Pistols	Leather Boots	Left-Handed	Crimson Red	Loud Thunder
Anne Bonny	Spiked Mace	Brass Spyglass	Right-Handed	Crimson Red	Loud Thunder
Calico Jack	Spiked Mace	Iron Anchor	Left-Handed	Deep Ocean Blue	Loud Thunder
Bilge Rat Bob	Heavy Harpoon	Lucky Compass	Left-Handed	Pitch Black	Squeaking Rats
Marooned Mac	Spiked Mace	Leather Boots	Left-Handed	Pitch Black	Scurvy Lemons
Stormy Sue	Dual Pistols	Iron Anchor	Right-Handed	Pitch Black	Loud Thunder
Hook-Handed Hal	Rusty Hook	Iron Anchor	Left-Handed	Pitch Black	Loud Thunder
Admiralty Annie	Golden Cutlass	Brass Spyglass	Right-Handed	Deep Ocean Blue	Loud Thunder
Cutlass Kate	Heavy Harpoon	Brass Spyglass	Left-Handed	Deep Ocean Blue	Squeaking Rats
Pegleg Pete	Rusty Hook	Silk Map	Right-Handed	Crimson Red	Loud Thunder
Captain Blackbeard	Golden Cutlass	Lucky Compass	Right-Handed	Pitch Black	Scurvy Lemons
Long John Silver	Heavy Harpoon	Silk Map	Right-Handed	Crimson Red	Squeaking Rats
Henry Morgan	Rusty Hook	Leather Boots	Left-Handed	Deep Ocean Blue	Scurvy Lemons
Breezy Bella	Spiked Mace	Iron Anchor	Right-Handed	Crimson Red	Loud Thunder
Barnaby Bluebeard	Dual Pistols	Brass Spyglass	Right-Handed	Crimson Red	Loud Thunder
Mary Read	Rusty Hook	Silk Map	Right-Handed	Pitch Black	Scurvy Lemons
Sir Francis Drake	Rusty Hook	Lucky Compass	Right-Handed	Crimson Red	Loud Thunder
Cannonball Connor	Spiked Mace	Leather Boots	Right-Handed	Pitch Black	Squeaking Rats
Tidal Wave Tom	Dual Pistols	Leather Boots	Left-Handed	Pitch Black	Scurvy Lemons
Jolly Roger	Golden Cutlass	Leather Boots	Left-Handed	Crimson Red	Loud Thunder

CLUE 1

The governor's guard says the safe was opened using a dial. The dial shows what percentage of the lock's combination has been cracked so far. Let's calculate the missing percentage to find the first clue!

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

Diagram illustrating a sequence of 20 boxes arranged in two rows. The top row contains 10 boxes, and the bottom row contains 10 boxes. The boxes are numbered 1 through 20. The 7th box in the top row and the 11th box in the top row are highlighted in orange and labeled 'T'.

36	42	35	22	39	20	1	36	35	44	10	35	37	11	10	36	34	37	35
1	26	34	30	6	38	30	10	32	22	1	37	37						

5% of 720 = $\rightarrow$ **T**

20% of 185 = → **S**

20% of 55 = $\rightarrow$ **N**

5% of 760 = → **Y**

10% of 320 = → **M**

40% of 105 = → **H**

5% of 400 = → **R**

60% of 10 = → **K**

50% of 60 = $\rightarrow$ **C**

40% of 110 = $\rightarrow$ **D**

5% of 520 = → **L**

5% of 680 = $\rightarrow$ **U**

5% of 700 = → **E**

50% of 78 = $\rightarrow$

25% of 4 = $\rightarrow$ **A**

40% of 55 = $\rightarrow$ **P**

20% of 50 = →

Scratch space:

CLUE 2 Exponents

To unlock the next clue, you must count the pirate's extra gunpowder barrels. They are stacked in matching rows and columns that multiply by themselves. Solve this power puzzle to learn about the suspect!

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

Diagram showing two rows of boxes representing numbers. The top row has 18 boxes with values 121, 289, 8, 32, 64, 32, 81, 8, 256, 121, 289, 216, 243, 400, 32, 121, 289, 8. The bottom row has 15 boxes with values 9, 289, 8, 8, 243, 9, 16, 121, 289, 121, 289, 8, 4, 16, 324, 289, 121. Some boxes are highlighted in orange and labeled with a 'T'.

$$11^2 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$20^2 = \boxed{} \rightarrow \boxed{\mathbf{D}}$$

$$4^3 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$18^2 = \boxed{} \rightarrow \boxed{\mathbf{G}}$$

$$2^5 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$$3^5 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$2^3 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$17^2 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$3^2 = \boxed{} \rightarrow \boxed{W}$$

$$2^4 = \boxed{} \rightarrow \boxed{1}$$

$$6^3 = \boxed{} \rightarrow \boxed{0}$$

$$9^2 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$2^8 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$2^2 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

Scratch space:

CLUE 3
Order of operations

We found a locked navigation chart on the desk! To read it, we must solve the pirate's secret code by doing the math steps in the exact right order. Solve this to uncover the next detail.

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

T																			
22	31	11	43	39	50	50	78	67	31	32	47	11	39	67	12	31	11	65	

				T															
35	50	10	73	22	31	10	65	73	11	39	39	50	26	39	67				

$5 \times 5 - 3 = \square \rightarrow \boxed{\text{T}}$

$8 \times 5 - 1 = \square \rightarrow \boxed{\text{R}}$

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

$10 \times 8 - 15 = \square \rightarrow \boxed{\text{N}}$

$11 \times 8 - 21 = \square \rightarrow \boxed{\text{S}}$

$11 \times 5 - 12 = \square \rightarrow \boxed{\text{C}}$

$10 + 8 \times 5 = \square \rightarrow \boxed{\text{O}}$

$16 + 8 \times 2 = \square \rightarrow \boxed{\text{I}}$

$3 \times 6 - 6 = \square \rightarrow \boxed{\text{W}}$

$8 \times 11 - 15 = \square \rightarrow \boxed{\text{D}}$

$4 + 3 \times 2 = \square \rightarrow \boxed{\text{U}}$

$11 \times 8 - 10 = \square \rightarrow \boxed{\text{K}}$

$41 + 2 \times 3 = \square \rightarrow \boxed{\text{V}}$

$3 \times 6 - 7 = \square \rightarrow \boxed{\text{E}}$

$8 + 9 \times 2 = \square \rightarrow \boxed{\text{A}}$

$20 + 5 \times 3 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

The thief left footprints on the sandy beach. The prints form equal rows of steps going toward the pirate ships. Multiply the steps to see which path the thief took!

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

W																		
16	81	77	99	100	3	24	54	96	20	22	45	49	99	3	20	81	24	
35	90	20	81	54	24	99	3	35	90	81	24	81	96	7				

$2 \times 8 = \square \rightarrow$ W	$11 \times 2 = \square \rightarrow$ I	$12 \times 8 = \square \rightarrow$ C	
$9 \times 6 = \square \rightarrow$ A	$9 \times 10 = \square \rightarrow$ H	$10 \times 10 = \square \rightarrow$ U	
$7 \times 7 = \square \rightarrow$ S	$11 \times 9 = \square \rightarrow$ O	$9 \times 9 = \square \rightarrow$ E	
$2 \times 12 = \square \rightarrow$ D	$1 \times 7 = \square \rightarrow$ K	$4 \times 5 = \square \rightarrow$ R	$1 \times 3 = \square \rightarrow$ N
$11 \times 7 = \square \rightarrow$ F	$7 \times 5 = \square \rightarrow$ T	$9 \times 5 = \square \rightarrow$ M	

Scratch space:

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

A group of friendly seagulls is sharing a pile of stolen hardtack crackers. If we divide the crackers equally among the birds, the leftover amount will lead us to the pirate's ultimate secret.

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:

$42 \div 7 = \boxed{}$

$56 \div 8 = \boxed{}$

$8 \div 4 = \boxed{}$

$120 \div 10 = \boxed{}$

$120 \div 12 = \boxed{}$

$10 \div 2 = \boxed{}$

$27 \div 9 = \boxed{}$

$11 \div 11 = \boxed{}$

$80 \div 10 = \boxed{}$

$45 \div 5 = \boxed{}$

$11 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain disguises themselves as a cabin boy, then steals the golden chest of doubloons.
2. The villain bursts through the galley doors, then pilfers the admiral's journal.
3. The villain creeps through the captain's quarters, then pilfers the admiral's journal.
4. The villain sneaks aboard the flagship, then steals the golden chest of doubloons.
5. The villain disguises themselves as a cabin boy, then pockets the royal crown jewels.
6. The villain disguises themselves as a cabin boy, then snatches the legendary map.
7. The villain bursts through the galley doors, then snatches the legendary map.
8. The villain sneaks aboard the flagship, then grabs the magic compass.
9. The villain disguises themselves as a cabin boy, then grabs the magic compass.
10. The villain bursts through the galley doors, then pockets the royal crown jewels.
11. The villain sneaks aboard the flagship, then snatches the legendary map.
12. The villain bursts through the galley doors, then grabs the magic compass.

Answer Key

The Great Shipwreck Cove Heist

Culprit: Pegleg Pete

Rusty Hook · Silk Map · Right-Handed · Crimson Red · Loud Thunder

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Percentages): "THE PIRATE DOES NOT USE A LUCKY COMPASS"

5% of 720 = 36 (T) · 20% of 185 = 37 (S) · 20% of 55 = 11 (N) · 5% of 760 = 38 (Y) · 10% of 320 = 32 (M) · 40% of 105 = 42 (H) · 5% of 400 = 20 (R) · 60% of 10 = 6 (K) · 50% of 60 = 30 (C) · 40% of 110 = 44 (D) · 5% of 520 = 26 (L) · 5% of 680 = 34 (U) · 5% of 700 = 35 (E) · 50% of 78 = 39 (I) · 25% of 4 = 1 (A) · 40% of 55 = 22 (P) · 20% of 50 = 10 (O)

Clue 2 (Exponents): "THE SUSPECT HOLDS THE WHEEL WITH THE RIGHT"

$11^2 = 121$ (T) · $20^2 = 400$ (D) · $4^3 = 64$ (U) · $18^2 = 324$ (G) · $2^5 = 32$ (S) · $3^5 = 243$ (L) · $2^3 = 8$ (E) · $17^2 = 289$ (H) · $3^2 = 9$ (W) · $2^4 = 16$ (I) · $6^3 = 216$ (O) · $9^2 = 81$ (P) · $2^8 = 256$ (C) · $2^2 = 4$ (R)

Clue 3 (Order of operations): "THE CROOK SHIVERS WHEN LOUD THUNDER ROARS"

$5 \times 5 - 3 = 22$ (T) · $8 \times 5 - 1 = 39$ (R) · $6 \times 6 - 5 = 31$ (H) · $10 \times 8 - 15 = 65$ (N) · $11 \times 8 - 21 = 67$ (S) · $11 \times 5 - 12 = 43$ (C) · $10 + 8 \times 5 = 50$ (O) · $16 + 8 \times 2 = 32$ (I) · $3 \times 6 - 6 = 12$ (W) · $8 \times 11 - 15 = 73$ (D) · $4 + 3 \times 2 = 10$ (U) · $11 \times 8 - 10 = 78$ (K) · $41 + 2 \times 3 = 47$ (V) · $3 \times 6 - 7 = 11$ (E) · $8 + 9 \times 2 = 26$ (A) · $20 + 5 \times 3 = 35$ (L)

Clue 4 (Multiplication facts (1-12)): "WE FOUND A CRIMSON RED THREAD ON THE DECK"

$2 \times 8 = 16$ (W) · $11 \times 2 = 22$ (I) · $12 \times 8 = 96$ (C) · $9 \times 6 = 54$ (A) · $9 \times 10 = 90$ (H) · $10 \times 10 = 100$ (U) · $7 \times 7 = 49$ (S) · $11 \times 9 = 99$ (O) · $9 \times 9 = 81$ (E) · $2 \times 12 = 24$ (D) · $1 \times 7 = 7$ (K) · $4 \times 5 = 20$ (R) · $1 \times 3 = 3$ (N) · $11 \times 7 = 77$ (F) · $7 \times 5 = 35$ (T) · $9 \times 5 = 45$ (M)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Pegleg Pete

$42 \div 7 = 6$ · $56 \div 8 = 7$ · $8 \div 4 = 2$ · $120 \div 10 = 12$ · $120 \div 12 = 10$ · $10 \div 2 = 5$ · $27 \div 9 = 3$ · $11 \div 11 = 1$ · $80 \div 10 = 8$ · $45 \div 5 = 9$ · $11 \div 1 = 11$