



The Mystery of the Lost Pirate Treasure

Grade 2 math · Place value, Addition, Subtraction, Word problems, Missing addends · Reading level grades 1-2

Detective: _____ Date: _____

Oh no! A sneaky pirate thief has taken the golden key to the main treasure chest! Captain Barnaby needs your help. Look for clues around the pirate ship to catch the thief.

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

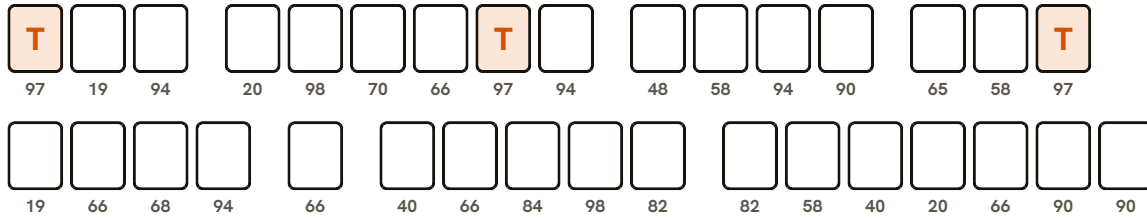
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	PIRATE SKILL	MAGIC GEAR	HOOK HAND	HEAD GEAR	BIG FEAR
Captain Kidd	cannon blaster	ghost lantern	right handed hook	tricorn hat	hates loud music
Grace O'Malley	map decoder	sea shell radio	left handed hook	captain wig	tickled by feathers
Jolly Roger	cannon blaster	magic compass	left handed hook	tricorn hat	tickled by feathers
Pirate Pete	spyglass eye	magic compass	right handed hook	captain wig	tickled by feathers
Captain Barnaby	map decoder	magic compass	left handed hook	bandana wrap	scared of frogs
Calico Jack	hook hand	peg leg booster	right handed hook	captain wig	scared of frogs
Anchor Andy	parrot whisperer	magic compass	right handed hook	tricorn hat	scared of frogs
Scurvy Steve	cannon blaster	sea shell radio	left handed hook	captain wig	hates loud music
Sailor Sally	hook hand	peg leg booster	right handed hook	captain wig	tickled by feathers
L'Arionaise	hook hand	wind sail	left handed hook	bandana wrap	tickled by feathers
Pegleg Paul	map decoder	peg leg booster	right handed hook	bandana wrap	scared of frogs
Helmsman Hank	map decoder	wind sail	right handed hook	tricorn hat	tickled by feathers
Anne Bonny	cannon blaster	wind sail	left handed hook	tricorn hat	hates loud music
Blackbeard	spyglass eye	peg leg booster	right handed hook	tricorn hat	scared of frogs
Stede Bonnet	spyglass eye	wind sail	right handed hook	captain wig	tickled by feathers
Henry Morgan	cannon blaster	ghost lantern	right handed hook	bandana wrap	hates loud music
Cannonball Kate	spyglass eye	sea shell radio	right handed hook	tricorn hat	hates loud music
Sailor Sue	map decoder	wind sail	right handed hook	captain wig	tickled by feathers
Cutlass Clara	spyglass eye	peg leg booster	right handed hook	tricorn hat	tickled by feathers
Captain Patty	spyglass eye	magic compass	left handed hook	bandana wrap	hates loud music
Barnacle Bill	hook hand	sea shell radio	right handed hook	captain wig	tickled by feathers

CLUE 1 Place value

We found a dusty lockbox with a code. To open it, we need to look at the tens and ones places on the gold scale. Let us find the digit values!

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



What number has 9 tens and 7 ones? → **T**

What number has 4 tens and 0 ones? → **M**

What number has 6 tens and 8 ones? → **V**

What number has 2 tens and 0 ones? → **P**

What number has 9 tens and 4 ones? → **E**

What number has 9 tens and 8 ones? → **I**

What number has 8 tens and 2 ones? → **C**

What number has 9 tens and 0 ones? → **S**

What number has 6 tens and 5 ones? → **N**

What number has 7 tens and 0 ones? → **R**

What number has 4 tens and 8 ones? → **D**

What number has 1 ten and 9 ones? → **H**

What number has 6 tens and 6 ones? → **A**

What number has 8 tens and 4 ones? → **G**

What number has 5 tens and 8 ones? → **O**

Scratch space:

CLUE 2

Barnaby counted the pirate hats on the deck. He added more hats from the cabin. Let us add the numbers to see how many we have in total!

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

32 57 81 67 78 79 81 84 57 53 40 84 95 46 26 96 57 32

57 95 85 73 81 73 57 53 53 39

$10 + 22 = \square \rightarrow \boxed{\text{T}}$

$11 + 28 = \square \rightarrow \boxed{\text{K}}$

$21 + 19 = \square \rightarrow \boxed{\mathbf{W}}$

$17 + 40 = \boxed{} \rightarrow \boxed{\text{H}}$

$24 + 43 = \boxed{} \rightarrow \boxed{\text{C}}$

$$42 + 39 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$68 + 28 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$40 + 44 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$22 + 24 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$31 + 42 = \boxed{} \rightarrow \boxed{\text{D}}$

$$30 + 48 = \boxed{} \rightarrow \boxed{\text{L}}$$

$19 + 7 = \square \rightarrow \boxed{\text{I}}$

$42 + 43 = \boxed{} \rightarrow \boxed{\text{N}}$

$58 + 37 = \square \rightarrow \boxed{\mathbf{A}}$

$$44 + 35 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$30 + 23 = \boxed{} \rightarrow \boxed{\text{O}}$$

Scratch space:

Subtraction

A heavy wave hit the ship and some water barrels fell into the sea. Let us subtract the lost barrels from our ship supply to find what is left!

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

Diagram illustrating a sequence of numbers and their corresponding 'true' (T) status:

Index	Number	True (T)
1	53	T
2	52	
3	73	
4	45	
5	24	
6	36	
7	36	
8	29	
9	24	
10	74	
11	70	
12	29	
13	14	
14	53	T
15	24	
16	27	
17	40	
18	36	
19	73	
20	69	
21	82	
22	18	
23	38	
24	73	
25	29	
26	53	T
27	52	
28	73	
29	12	
30	14	

$$56 - 3 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$25 - 1 = \boxed{} \rightarrow \boxed{I}$$

$75 - 6 = \boxed{} \rightarrow \boxed{\text{D}}$

$47 - 18 = \square \rightarrow \mathbf{A}$

$33 - 21 = \boxed{} \rightarrow \boxed{\text{R}}$

$105 - 23 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$$56 - 16 = \boxed{} \rightarrow \boxed{\text{K}}$$

$71 - 19 = \boxed{} \rightarrow \boxed{\text{H}}$

$16 - 2 = \boxed{} \rightarrow \boxed{\text{S}}$

$$57 - 39 = \boxed{} \rightarrow \boxed{\text{Y}}$$

$$71 - 26 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$89 - 15 = \boxed{} \rightarrow \boxed{\text{N}}$

$86 - 13 = \boxed{} \rightarrow \boxed{\text{E}}$

$50 - 23 = \square \rightarrow \mathbf{C}$

$110 - 40 = \boxed{} \rightarrow \boxed{W}$

$78 - 40 = \boxed{} \rightarrow \boxed{\text{F}}$

$64 - 28 = \boxed{} \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 4

Word problems

The ship chef wants to share the sour lime treats. We must solve a quick word puzzle to know how many limes each young pirate gets.

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

A strand of C G hair turned up at the scene.

24 37 32 27 37 33 7 40 33

Captain Barnaby lined up 6 rows of 4 gold coins. How many gold coins in all?

Answer: → C

There were 17 wooden planks. 10 were used up. How many wooden planks are left?

Answer: → N

Captain Barnaby lined up 4 rows of 8 sour limes. How many sour limes in all?

Answer: → P

Captain Barnaby found 9 coconut cups yesterday and 18 more today. How many coconut cups in all?

Answer: → T

Captain Barnaby lined up 8 rows of 5 coconut cups. How many coconut cups in all?

Answer: → W

There were 36 shiny shells. 3 were used up. How many shiny shells are left?

Answer: → I

There were 46 sour limes. 9 were used up. How many sour limes are left?

Answer: → A

Scratch space:

CLUE 5**Missing addends - the last clue**

The captain needs twelve cannonballs, but some are missing from the rack. Let us find the missing number to make a full set for the battle!

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:

$10 + \underline{\quad} = 17$

$5 + \underline{\quad} = 11$

$7 + \underline{\quad} = 9$

$2 + \underline{\quad} = 10$

$8 + \underline{\quad} = 19$

$3 + \underline{\quad} = 12$

$1 + \underline{\quad} = 4$

$7 + \underline{\quad} = 8$

$9 + \underline{\quad} = 19$

$3 + \underline{\quad} = 7$

$7 + \underline{\quad} = 19$

Step 2 - cross out the sentence with each answer:

1. The villain took the secret pirate map, then escaped in a tiny rowboat.
2. The villain took the secret pirate map, then jumped onto the big ship.
3. The villain hid the captain wooden leg, then ran down the dock.
4. The villain stole the shiny treasure chest, then jumped onto the big ship.
5. The villain stole the shiny treasure chest, then fled into the dark cave.
6. The villain grabbed the golden skull key, then jumped onto the big ship.
7. The villain stole the shiny treasure chest, then escaped in a tiny rowboat.
8. The villain grabbed the golden skull key, then escaped in a tiny rowboat.
9. The villain stole the shiny treasure chest, then ran down the dock.
10. The villain took the talking parrot, then escaped in a tiny rowboat.
11. The villain stole the shiny treasure chest, then swam out to the island.
12. The villain took the secret pirate map, then fled into the dark cave.

Answer Key

The Mystery of the Lost Pirate Treasure

Culprit: Barnacle Bill

hook hand · sea shell radio · right handed hook · captain wig · tickled by feathers

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE PIRATE DOES NOT HAVE A MAGIC COMPASS"

What number has 9 tens and 7 ones? = 97 (T) · What number has 4 tens and 0 ones? = 40 (M) · What number has 6 tens and 8 ones? = 68 (V) · What number has 2 tens and 0 ones? = 20 (P) · What number has 9 tens and 4 ones? = 94 (E) · What number has 9 tens and 8 ones? = 98 (I) · What number has 8 tens and 2 ones? = 82 (C) · What number has 9 tens and 0 ones? = 90 (S) · What number has 6 tens and 5 ones? = 65 (N) · What number has 7 tens and 0 ones? = 70 (R) · What number has 4 tens and 8 ones? = 48 (D) · What number has 1 ten and 9 ones? = 19 (H) · What number has 6 tens and 6 ones? = 66 (A) · What number has 8 tens and 4 ones? = 84 (G) · What number has 5 tens and 8 ones? = 58 (O)

Clue 2 (Addition): "THE CLUE SHOWS A RIGHT HANDED HOOK"

$10 + 22 = 32$ (T) · $11 + 28 = 39$ (K) · $21 + 19 = 40$ (W) · $17 + 40 = 57$ (H) · $24 + 43 = 67$ (C) · $42 + 39 = 81$ (E) · $68 + 28 = 96$ (G) · $40 + 44 = 84$ (S) · $22 + 24 = 46$ (R) · $31 + 42 = 73$ (D) · $30 + 48 = 78$ (L) · $19 + 7 = 26$ (I) · $42 + 43 = 85$ (N) · $58 + 37 = 95$ (A) · $44 + 35 = 79$ (U) · $30 + 23 = 53$ (O)

Clue 3 (Subtraction): "THE VILLAIN WAS TICKLED BY FEATHERS"

$56 - 3 = 53$ (T) · $25 - 1 = 24$ (I) · $75 - 6 = 69$ (D) · $47 - 18 = 29$ (A) · $33 - 21 = 12$ (R) · $105 - 23 = 82$ (B) · $56 - 16 = 40$ (K) · $71 - 19 = 52$ (H) · $16 - 2 = 14$ (S) · $57 - 39 = 18$ (Y) · $71 - 26 = 45$ (V) · $89 - 15 = 74$ (N) · $86 - 13 = 73$ (E) · $50 - 23 = 27$ (C) · $110 - 40 = 70$ (W) · $78 - 40 = 38$ (F) · $64 - 28 = 36$ (L)

Clue 4 (Word problems): "CAPTAIN WIG"

Captain Barnaby lined up 6 rows of 4 gold coins. How many gold coins in all? = 24 (C) · There were 17 wooden planks. 10 were used up. How many wooden planks are left? = 7 (N) · Captain Barnaby lined up 4 rows of 8 sour limes. How many sour limes in all? = 32 (P) · Captain Barnaby found 9 coconut cups yesterday and 18 more today. How many coconut cups in all? = 27 (T) · Captain Barnaby lined up 8 rows of 5 coconut cups. How many coconut cups in all? = 40 (W) · There were 36 shiny shells. 3 were used up. How many shiny shells are left? = 33 (I) · There were 46 sour limes. 9 were used up. How many sour limes are left? = 37 (A)

Clue 5 (Missing addends): surviving statement is box 5 → Barnacle Bill

$10 + \underline{\quad} = 17 = 7$ · $5 + \underline{\quad} = 11 = 6$ · $7 + \underline{\quad} = 9 = 2$ · $2 + \underline{\quad} = 10 = 8$ · $8 + \underline{\quad} = 19 = 11$ · $3 + \underline{\quad} = 12 = 9$ · $1 + \underline{\quad} = 4 = 3$ · $7 + \underline{\quad} = 8 = 1$ · $9 + \underline{\quad} = 19 = 10$ · $3 + \underline{\quad} = 7 = 4$ · $7 + \underline{\quad} = 19 = 12$