



The Ghost Pirate of the Whispering Archipelagos

Grade 5 math · Addition, Subtraction, Place value, Fractions of a number · Reading level grades 5-6

Detective: _____ **Date:** _____

The brave captains Joshua, Dax, and Zeno stepped ashore to trade for supplies. While they were gone, a mysterious ghost pirate slipped onto the Santiana and snatched the Golden Astrolabe! The crew needs your help to track down the thief and recover their navigation guide before the storm rolls in.

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 ghost pirate is _____

Possible suspects

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

NAME	ELEMENTAL ABILITY	STOLEN GEAR	SABER GRIP	HAIR STYLE	SECRET VULNERABILITY
Salty Silas	storm calling	glowing map	left handed grip	braided black hair	shine of bright mirrors
Compass Cole	fog weaving	brass spyglass	right handed grip	bleached blond locks	sound of sea whistles
Tide Taylor	fog weaving	iron grapple	right handed grip	bleached blond locks	sound of sea whistles
Breaker Ben	wind whispering	glowing map	right handed grip	crimson red curls	shine of bright mirrors
Captain Joshua	shadow sailing	silver compass	right handed grip	bleached blond locks	sound of sea whistles
Barrett Bay	tide summoning	golden cutlass	right handed grip	bleached blond locks	sound of sea whistles
Captain Dax	fog weaving	iron grapple	left handed grip	bleached blond locks	sound of sea whistles
Stormy Stella	wind whispering	glowing map	left handed grip	crimson red curls	shine of bright mirrors
Barnaby Bones	storm calling	golden cutlass	right handed grip	bleached blond locks	smell of peppermint
Morgan Mast	shadow sailing	golden cutlass	right handed grip	bleached blond locks	sound of sea whistles
Seabreeze Sam	shadow sailing	iron grapple	left handed grip	bleached blond locks	sound of sea whistles
Finley Fleet	fog weaving	iron grapple	right handed grip	braided black hair	sound of sea whistles
Coral Kate	storm calling	glowing map	right handed grip	braided black hair	sound of sea whistles
Finnley Fisher	wind whispering	brass spyglass	right handed grip	bleached blond locks	shine of bright mirrors
Plank Percy	shadow sailing	iron grapple	right handed grip	braided black hair	smell of peppermint
Rigging Roger	fog weaving	brass spyglass	left handed grip	bleached blond locks	shine of bright mirrors
Marina Moss	tide summoning	glowing map	left handed grip	crimson red curls	smell of peppermint
Sailor Sally	tide summoning	iron grapple	right handed grip	bleached blond locks	shine of bright mirrors
Gale Gust	wind whispering	golden cutlass	right handed grip	bleached blond locks	smell of peppermint
Scurvy Sam	wind whispering	golden cutlass	left handed grip	braided black hair	smell of peppermint
Captain Zeno	tide summoning	golden cutlass	left handed grip	braided black hair	shine of bright mirrors

CLUE 1 Addition

Captain Joshua tallies up the total crates of ship biscuits loaded onto the Santiana to see how long they can chase the rogue vessel.

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

Diagram illustrating the arrangement of boxes and their corresponding numbers:

Top Row (18 boxes):

- Box 1: Orange, labeled 'T' (Number: 3236)
- Box 2: White (Number: 5063)
- Box 3: White (Number: 3178)
- Box 4: White (Number: 2585)
- Box 5: White (Number: 2967)
- Box 6: White (Number: 2349)
- Box 7: White (Number: 2349)
- Box 8: White (Number: 4997)
- Box 9: White (Number: 2967)
- Box 10: White (Number: 2241)
- Box 11: White (Number: 4863)
- Box 12: White (Number: 5341)
- Box 13: White (Number: 3178)
- Box 14: White (Number: 3600)
- Box 15: White (Number: 2241)
- Box 16: White (Number: 5341)
- Box 17: Orange, labeled 'T' (Number: 3236)

Bottom Row (18 boxes):

- Box 1: White (Number: 5063)
- Box 2: White (Number: 4997)
- Box 3: White (Number: 2585)
- Box 4: White (Number: 3178)
- Box 5: Orange, labeled 'T' (Number: 3236)
- Box 6: White (Number: 5063)
- Box 7: White (Number: 3178)
- Box 8: White (Number: 3600)
- Box 9: White (Number: 2967)
- Box 10: White (Number: 2349)
- Box 11: White (Number: 2585)
- Box 12: White (Number: 3178)
- Box 13: White (Number: 8734)
- Box 14: White (Number: 5345)
- Box 15: White (Number: 5341)
- Box 16: White (Number: 2797)
- Box 17: White (Number: 7171)
- Box 18: White (Number: 4997)

$$1780 + 1456 = \boxed{} \rightarrow \boxed{\mathbf{T}}$$

$$1738 + 847 = \boxed{} \rightarrow \mathbf{V}$$

$$1516 + 1662 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$4111 + 4623 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$3165 + 2176 = \boxed{} \rightarrow \boxed{0}$$

$$4914 + 2257 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$1281 + 2319 = \boxed{} \rightarrow \boxed{\text{S}}$$

$1368 + 981 = \boxed{} \rightarrow \mathbf{L}$

$1862 + 3001 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$$917 + 2050 = \boxed{} \rightarrow \boxed{\text{I}}$$

$3472 + 1873 = \boxed{} \rightarrow \boxed{\text{C}}$

$$2687 + 2376 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$1520 + 721 = \boxed{} \rightarrow \boxed{\mathbf{N}}$$

$$1345 + 1452 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$3175 + 1822 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

Scratch space:

CLUE 2
Subtraction

Captain Dax counts how many water barrels are left after the phantom pirate sabotaged their supplies to slow them down.

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

T															
6839	2437	7152	4788	3182	3121	3737	7152	3121	6620	6620	2437	3182	3737	1997	

				T											
8282	4947	6381	2437	6839	2437	1997	2927	7636	7152	7636	6620	3737	3182	8282	7636

6620	3737	4947	7581	7152

9911 - 3072 = → T	8338 - 56 = → R	12374 - 4793 = → P
6934 - 3752 = → O	8907 - 1755 = → E	8976 - 1340 = → D
7775 - 2828 = → I	3152 - 225 = → N	2362 - 365 = → A
7291 - 910 = → G	7029 - 2241 = → C	10117 - 3497 = → S
5906 - 2785 = → B	4951 - 2514 = → H	5201 - 1464 = → W

Scratch space:

CLUE 3 Place value

Captain Zeno inspects a dial on the locked navigation chest, focusing on the exact value of the hundreds place to crack the code.

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

T													
50	7000	40	20	70	5000	300	6000	70	2000	20	40	90	

				T								T				
3000	7000	400	20	50	700	40	20	30	90	10	40	20	50	7000	40	30

2000	700	40	40

What is the value of the 5 in 94,254? →

T

What is the value of the 7 in 542,716? →

L

What is the value of the 4 in 988,546? →

E

What is the value of the 7 in 880,473? →

O

What is the value of the 5 in 445,661? →

U

What is the value of the 3 in 683,521? →

W

What is the value of the 2 in 168,126? →

S

What is the value of the 9 in 661,590? →

A

What is the value of the 6 in 76,512? →

D

What is the value of the 4 in 633,483? →

I

What is the value of the 7 in 347,618? →

H

What is the value of the 3 in 16,535? →

M

What is the value of the 3 in 797,378? →

N

What is the value of the 1 in 85,914? →

K

What is the value of the 2 in 532,879? →

F

Scratch space:

CLUE 4
Fractions of a number

The crew divides a crate of sweet oranges, figuring out exactly how many pieces are in a fraction of the share.

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

A										A				
18	27	35	10	39	35	37	4	27	38	18	10	2	38	13

						A				A				
4	27	35	20	13	2	18	23	9	32	18	3	27	38	37

$3/10 \text{ of } 60 = \square \rightarrow \text{A}$

$4/10 \text{ of } 95 = \square \rightarrow \text{E}$

$6/10 \text{ of } 45 = \square \rightarrow \text{L}$

$2/8 \text{ of } 148 = \square \rightarrow \text{F}$

$3/6 \text{ of } 18 = \square \rightarrow \text{R}$

$1/8 \text{ of } 184 = \square \rightarrow \text{I}$

$2/8 \text{ of } 40 = \square \rightarrow \text{C}$

$2/8 \text{ of } 16 = \square \rightarrow \text{B}$

$3/8 \text{ of } 56 = \square \rightarrow \text{T}$

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

$5/10 \text{ of } 64 = \square \rightarrow \text{W}$

$4/8 \text{ of } 40 = \square \rightarrow \text{N}$

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

$7/8 \text{ of } 40 = \square \rightarrow \text{O}$

$6/10 \text{ of } 65 = \square \rightarrow \text{K}$

$4/8 \text{ of } 6 = \square \rightarrow \text{S}$

Scratch space:

CLUE 5**Fractions of a number - the last clue**

To catch the swift robber, the sailmakers must patch up a specific fraction of the damaged canvas sails before nightfall.

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:

$3/8 \text{ of } 24 = \boxed{}$

$6/8 \text{ of } 8 = \boxed{}$

$2/10 \text{ of } 55 = \boxed{}$

$1/4 \text{ of } 32 = \boxed{}$

$1/4 \text{ of } 12 = \boxed{}$

$3/6 \text{ of } 4 = \boxed{}$

$2/10 \text{ of } 50 = \boxed{}$

$1/10 \text{ of } 10 = \boxed{}$

$5/6 \text{ of } 6 = \boxed{}$

$6/8 \text{ of } 16 = \boxed{}$

$5/10 \text{ of } 14 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain calls down a lightning storm, then checks a strange glowing map.
2. The villain whispers to the eastern winds, then throws an iron grapple hook.
3. The villain calls down a lightning storm, then polishes a golden cutlass.
4. The villain weaves thick coastal fog, then peers through a brass spyglass.
5. The villain calls down a lightning storm, then throws an iron grapple hook.
6. The villain summons a sudden high tide, then polishes a golden cutlass.
7. The villain summons a sudden high tide, then consults a silver compass.
8. The villain summons a sudden high tide, then peers through a brass spyglass.
9. The villain weaves thick coastal fog, then throws an iron grapple hook.
10. The villain whispers to the eastern winds, then polishes a golden cutlass.
11. The villain sails silently through the shadows, then polishes a golden cutlass.
12. The villain summons a sudden high tide, then throws an iron grapple hook.

Answer Key

The Ghost Pirate of the Whispering Archipelagos

Culprit: Compass Cole

fog weaving · brass spyglass · right handed grip · bleached blond locks · sound of sea whistles

Trail: Start 21 → Clue 1 20 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE THE SILVER COMPASS"

$1780 + 1456 = 3236$ (T) · $1738 + 847 = 2585$ (V) · $1516 + 1662 = 3178$ (E) · $4111 + 4623 = 8734$ (R) · $3165 + 2176 = 5341$ (O) · $4914 + 2257 = 7171$ (P) · $1281 + 2319 = 3600$ (S) · $1368 + 981 = 2349$ (L) · $1862 + 3001 = 4863$ (D) · $917 + 2050 = 2967$ (I) · $3472 + 1873 = 5345$ (C) · $2687 + 2376 = 5063$ (H) · $1520 + 721 = 2241$ (N) · $1345 + 1452 = 2797$ (M) · $3175 + 1822 = 4997$ (A)

Clue 2 (Subtraction): "THE COBWEBS SHOW A RIGHT HANDED SWORD SWIPE"

$9911 - 3072 = 6839$ (T) · $8338 - 56 = 8282$ (R) · $12374 - 4793 = 7581$ (P) · $6934 - 3752 = 3182$ (O) · $8907 - 1755 = 7152$ (E) · $8976 - 1340 = 7636$ (D) · $7775 - 2828 = 4947$ (I) · $3152 - 225 = 2927$ (N) · $2362 - 365 = 1997$ (A) · $7291 - 910 = 6381$ (G) · $7029 - 2241 = 4788$ (C) · $10117 - 3497 = 6620$ (S) · $5906 - 2785 = 3121$ (B) · $4951 - 2514 = 2437$ (H) · $5201 - 1464 = 3737$ (W)

Clue 3 (Place value): "THE SOUND OF SEA WHISTLES MAKES THEM FLEE"

What is the value of the 5 in 94,254? = 50 (T) · What is the value of the 7 in 542,716? = 700 (L) · What is the value of the 4 in 988,546? = 40 (E) · What is the value of the 7 in 880,473? = 70 (O) · What is the value of the 5 in 445,661? = 5000 (U) · What is the value of the 3 in 683,521? = 3000 (W) · What is the value of the 2 in 168,126? = 20 (S) · What is the value of the 9 in 661,590? = 90 (A) · What is the value of the 6 in 76,512? = 6000 (D) · What is the value of the 4 in 633,483? = 400 (I) · What is the value of the 7 in 347,618? = 7000 (H) · What is the value of the 3 in 16,535? = 30 (M) · What is the value of the 3 in 797,378? = 300 (N) · What is the value of the 1 in 85,914? = 10 (K) · What is the value of the 2 in 532,879? = 2000 (F)

Clue 4 (Fractions of a number): "A LOCK OF BLEACHED BLOND HAIR WAS LEFT"

$\frac{3}{10}$ of 60 = 18 (A) · $\frac{4}{10}$ of 95 = 38 (E) · $\frac{6}{10}$ of 45 = 27 (L) · $\frac{2}{8}$ of 148 = 37 (F) · $\frac{3}{6}$ of 18 = 9 (R) · $\frac{1}{8}$ of 184 = 23 (I) · $\frac{2}{8}$ of 40 = 10 (C) · $\frac{2}{8}$ of 16 = 4 (B) · $\frac{3}{8}$ of 56 = 21 (T) · $\frac{1}{5}$ of 65 = 13 (D) · $\frac{5}{10}$ of 64 = 32 (W) · $\frac{4}{8}$ of 40 = 20 (N) · $\frac{2}{6}$ of 6 = 2 (H) · $\frac{7}{8}$ of 40 = 35 (O) · $\frac{6}{10}$ of 65 = 39 (K) · $\frac{4}{8}$ of 6 = 3 (S)

Clue 5 (Fractions of a number): surviving statement is box 4 → Compass Cole

$\frac{3}{8}$ of 24 = 9 · $\frac{6}{8}$ of 8 = 6 · $\frac{2}{10}$ of 55 = 11 · $\frac{1}{4}$ of 32 = 8 · $\frac{1}{4}$ of 12 = 3 · $\frac{3}{6}$ of 4 = 2 · $\frac{2}{10}$ of 50 = 10 · $\frac{1}{10}$ of 10 = 1 · $\frac{5}{6}$ of 6 = 5 · $\frac{6}{8}$ of 16 = 12 · $\frac{5}{10}$ of 14 = 7