



The Cloud Harbor Mystery

Grade 3 math · Place value, Addition, Subtraction, Rounding, Division · Reading level grades 1-2

Detective: _____ Date: _____

The Great Sky Pearl has been snatched from the floating Sky Harbor! Captain Pip needs the help of the brave Cloud Patrol to track down the sneaky sky pirate. We must search the clouds, solve the math puzzles, 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 sky pirate is _____

Possible suspects

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

NAME	AIRSHIP PILOT SKILL	FAVORITE GADGET	EYE WEAR	HAIR COLOR	SILLY WEAKNESS
Gale Gail	Star Navigator	Spark Sparkler	Black Eyepatch	Sun Yellow Hair	Scared of tickly feathers
Breezy Bella	Cloud Drifter	Bubble Blaster	Shiny Goggles	Neon Pink Hair	Sneezes near birds
First Mate Molly	Gale Rider	Bubble Blaster	Shiny Goggles	Neon Pink Hair	Scared of tickly feathers
Captain Claw	Cloud Drifter	Turbo Booster	Black Eyepatch	Neon Pink Hair	Afraid of heights
Patches McGee	Cloud Drifter	Turbo Booster	Black Eyepatch	Sun Yellow Hair	Scared of tickly feathers
Zippy Zack	Storm Chaser	Grappling Hook	Shiny Goggles	Sun Yellow Hair	Scared of tickly feathers
Jolly Roger	Wind Whisperer	Grappling Hook	Black Eyepatch	Sun Yellow Hair	Afraid of heights
Windy Wendy	Star Navigator	Spark Sparkler	Black Eyepatch	Bright Blue Hair	Afraid of heights
Salty Sue	Wind Whisperer	Bubble Blaster	Black Eyepatch	Bright Blue Hair	Scared of tickly feathers
Sky Sailor Sam	Gale Rider	Net Launcher	Shiny Goggles	Bright Blue Hair	Afraid of heights
Penny Plunder	Gale Rider	Turbo Booster	Black Eyepatch	Bright Blue Hair	Afraid of heights
Stormy Stan	Star Navigator	Bubble Blaster	Black Eyepatch	Bright Blue Hair	Afraid of heights
Captain Pip	Wind Whisperer	Spark Sparkler	Black Eyepatch	Bright Blue Hair	Afraid of heights
Peggy Plume	Cloud Drifter	Spark Sparkler	Black Eyepatch	Sun Yellow Hair	Sneezes near birds
Peggy Pegleg	Cloud Drifter	Net Launcher	Shiny Goggles	Bright Blue Hair	Afraid of heights
Rusty Rudder	Storm Chaser	Net Launcher	Shiny Goggles	Bright Blue Hair	Afraid of heights
Breezy Bob	Storm Chaser	Net Launcher	Shiny Goggles	Sun Yellow Hair	Sneezes near birds
Barnaby Barnacle	Star Navigator	Grappling Hook	Black Eyepatch	Bright Blue Hair	Afraid of heights
Skipper Skip	Gale Rider	Turbo Booster	Black Eyepatch	Sun Yellow Hair	Afraid of heights
Scurvy Steve	Wind Whisperer	Bubble Blaster	Shiny Goggles	Sun Yellow Hair	Sneezes near birds
Captain Coco	Wind Whisperer	Grappling Hook	Black Eyepatch	Bright Blue Hair	Scared of tickly feathers

CLUE 1

We check the airship dashboard. The digital dials are broken. We must look at the place value of the digits to read the map.

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

T																T	
900	30	600	80	10	100	100	4000	10	200	7000	70	600	300	200	70	900	
			T			T									T		
2000	300	600	900	30	600	900	2000	3000	400	70	400	70	70	300	900	600	3000

What is the value of the 9 in 973? → **T**

What is the value of the 3 in 437? → **H**

What is the value of the 2 in 6,269? → **N**

What is the value of the 4 in 94,261? → **A**

What is the value of the 7 in 47,893? → **D**

What is the value of the 3 in 3,276? → **R**

What is the value of the 6 in 677? → **E**

What is the value of the 8 in 9,181? → **V**

What is the value of the 1 in 818? →

What is the value of the 3 in 371? → **S**

What is the value of the 1 in 2,159? → **L**

What is the value of the 2 in 92,447? → **U**

What is the value of the 7 in 4,873? →

What is the value of the 4 in 403? → **B**

Scratch space:

CLUE 2 Addition

Barnaby the Parrot helps us count the shiny coins. We must add the two shiny piles together to find the next clue.

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

T								T										
638	853	204	524	337	587	853	638	337	426	587	524	524	853	516	989	826		

											T		
829	464	826	900	738	204	344	204	266	826	638	900	853	

$397 + 241 = \square \rightarrow$ T	$230 + 107 = \square \rightarrow$ I	$346 + 170 = \square \rightarrow$ O
$587 + 402 = \square \rightarrow$ W	$191 + 153 = \square \rightarrow$ Y	$463 + 275 = \square \rightarrow$ K
$356 + 497 = \square \rightarrow$ H	$443 + 386 = \square \rightarrow$ B	$470 + 430 = \square \rightarrow$ C
$180 + 246 = \square \rightarrow$ N	$197 + 327 = \square \rightarrow$ S	$318 + 146 = \square \rightarrow$ L
$474 + 352 = \square \rightarrow$ A	$79 + 187 = \square \rightarrow$ P	$178 + 409 = \square \rightarrow$ G
$64 + 140 = \square \rightarrow$ E		

Scratch space:

CLUE 3 Subtraction

Some rope ladders are missing from the deck. We must subtract the remaining ropes to see how many the thief took.

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

T																		
517	518	213	436	716	325	213	603	213	325	436	716	737	325	716	800	712	467	737

518	800	313	518	525	692	716	150	213	602

645 - 128 = → T	882 - 280 = → S	817 - 101 = → A
660 - 135 = → P	937 - 225 = → D	1021 - 284 = → F
523 - 5 = → H	182 - 32 = → C	665 - 340 = → R
501 - 65 = → Y	941 - 249 = → L	493 - 180 = → G
1000 - 200 = → I	321 - 108 = → E	670 - 67 = → V
647 - 180 = → O		

Scratch space:

CLUE 4 Rounding

The stormy wind makes the telescope shake. We cannot see the exact number of miles. We must round to the nearest ten.

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

A				A															
80	500	400	7000	80	900	200	8000	800	40	7000	9000	2000	60	400	40	3000	90	5000	
	A				A														
60	80	9000	7000	300	80	500	3000	5000	800	400									

Round 77 to the nearest ten → **A**

Round 349 to the nearest hundred → **W**

Round 6,645 to the nearest thousand → **R**

Round 59 to the nearest ten → **H**

Round 8,269 to the nearest thousand → **O**

Round 9,051 to the nearest thousand → **I**

Round 174 to the nearest hundred → **D**

Round 3,314 to the nearest thousand → **L**

Round 86 to the nearest ten → **U**

Round 44 to the nearest ten → **B**

Round 839 to the nearest hundred → **F**

Round 4,589 to the nearest thousand → **E**

Round 2,071 to the nearest thousand → **G**

Round 510 to the nearest hundred → **S**

Round 416 to the nearest hundred → **T**

Round 901 to the nearest hundred → **N**

Scratch space:

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

The crew needs to share the sky maps equally. We must divide the maps into even piles so everyone has one.

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:

$8 \div 8 = \boxed{}$

$28 \div 4 = \boxed{}$

$36 \div 6 = \boxed{}$

$20 \div 10 = \boxed{}$

$99 \div 9 = \boxed{}$

$60 \div 12 = \boxed{}$

$16 \div 2 = \boxed{}$

$36 \div 9 = \boxed{}$

$60 \div 5 = \boxed{}$

$90 \div 9 = \boxed{}$

$108 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain flew the steam rocket, then left a small toy compass.
2. The villain sailed the cloud boat, then dropped shiny gold coins.
3. The villain flew the steam rocket, then dropped shiny gold coins.
4. The villain guided the wood glider, then left a small toy compass.
5. The villain guided the wood glider, then lost a wooden spyglass.
6. The villain spun the airship wheel, then left a small toy compass.
7. The villain flew the steam rocket, then dropped some rope ladders.
8. The villain sailed the cloud boat, then left a small toy compass.
9. The villain spun the airship wheel, then lost a wooden spyglass.
10. The villain sailed the cloud boat, then dropped some rope ladders.
11. The villain guided the wood glider, then dropped some rope ladders.
12. The villain guided the wood glider, then dropped shiny gold coins.

Answer Key

The Cloud Harbor Mystery

Culprit: Barnaby Barnacle

Star Navigator · Grappling Hook · Black Eyepatch · Bright Blue Hair · Afraid of heights

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE THE TURBO BOOSTER"

What is the value of the 9 in 973? = 900 (T) · What is the value of the 3 in 437? = 30 (H) · What is the value of the 2 in 6,269? = 200 (N) · What is the value of the 4 in 94,261? = 4000 (A) · What is the value of the 7 in 47,893? = 7000 (D) · What is the value of the 3 in 3,276? = 3000 (R) · What is the value of the 6 in 677? = 600 (E) · What is the value of the 8 in 9,181? = 80 (V) · What is the value of the 1 in 818? = 10 (I) · What is the value of the 3 in 371? = 300 (S) · What is the value of the 1 in 2,159? = 100 (L) · What is the value of the 2 in 92,447? = 2000 (U) · What is the value of the 7 in 4,873? = 70 (O) · What is the value of the 4 in 403? = 400 (B)

Clue 2 (Addition): "THE SIGHTINGS SHOW A BLACK EYEPATCH"

$397 + 241 = 638$ (T) · $230 + 107 = 337$ (I) · $346 + 170 = 516$ (O) · $587 + 402 = 989$ (W) · $191 + 153 = 344$ (Y) · $463 + 275 = 738$ (K) · $356 + 497 = 853$ (H) · $443 + 386 = 829$ (B) · $470 + 430 = 900$ (C) · $180 + 246 = 426$ (N) · $197 + 327 = 524$ (S) · $318 + 146 = 464$ (L) · $474 + 352 = 826$ (A) · $79 + 187 = 266$ (P) · $178 + 409 = 587$ (G) · $64 + 140 = 204$ (E)

Clue 3 (Subtraction): "THEY ARE VERY AFRAID OF HIGH PLACES"

$645 - 128 = 517$ (T) · $882 - 280 = 602$ (S) · $817 - 101 = 716$ (A) · $660 - 135 = 525$ (P) · $937 - 225 = 712$ (D) · $1021 - 284 = 737$ (F) · $523 - 5 = 518$ (H) · $182 - 32 = 150$ (C) · $665 - 340 = 325$ (R) · $501 - 65 = 436$ (Y) · $941 - 249 = 692$ (L) · $493 - 180 = 313$ (G) · $1000 - 200 = 800$ (I) · $321 - 108 = 213$ (E) · $670 - 67 = 603$ (V) · $647 - 180 = 467$ (O)

Clue 4 (Rounding): "A STRAND OF BRIGHT BLUE HAIR WAS LEFT"

Round 77 to the nearest ten = 80 (A) · Round 349 to the nearest hundred = 300 (W) · Round 6,645 to the nearest thousand = 7000 (R) · Round 59 to the nearest ten = 60 (H) · Round 8,269 to the nearest thousand = 8000 (O) · Round 9,051 to the nearest thousand = 9000 (I) · Round 174 to the nearest hundred = 200 (D) · Round 3,314 to the nearest thousand = 3000 (L) · Round 86 to the nearest ten = 90 (U) · Round 44 to the nearest ten = 40 (B) · Round 839 to the nearest hundred = 800 (F) · Round 4,589 to the nearest thousand = 5000 (E) · Round 2,071 to the nearest thousand = 2000 (G) · Round 510 to the nearest hundred = 500 (S) · Round 416 to the nearest hundred = 400 (T) · Round 901 to the nearest hundred = 900 (N)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Barnaby Barnacle

$8 \div 8 = 1$ · $28 \div 4 = 7$ · $36 \div 6 = 6$ · $20 \div 10 = 2$ · $99 \div 9 = 11$ · $60 \div 12 = 5$ · $16 \div 2 = 8$ · $36 \div 9 = 4$ · $60 \div 5 = 12$ · $90 \div 9 = 10$ · $108 \div 12 = 9$