



The Mystery of Sunken Shell Cove

Grade 3 math · Skip counting, Rounding, Addition, Subtraction, Division · Reading level grades 3-4

Detective: _____ Date: _____

Someone swiped the golden trophy right before the annual Sunken Shell Cove Sandcastle Contest! The Head Lifeguard needs your help to decode the clues, track down the Beach Bandit, and save the summer festival.

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 Beach Bandit is _____

Possible suspects

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

NAME	MAIN MOVE	TRICKY GEAR	EYEWEAR	HAIR COLOR	SECRET FOIL
Ocean Oliver	sunbeam flashing	seaweed lasso	wears sunglasses	seafoam green	cold ice cream
Kai Surfer	dune leaping	coconut launcher	wears sunglasses	sandy blond	squirt guns
Shelly Conch	wave riding	coconut launcher	wears sun visor	neon pink	squirt guns
Marina Wave	sunbeam flashing	crab summoner	wears sun visor	neon pink	squirt guns
Tide Taylor	wave riding	crab summoner	wears sunglasses	neon pink	squirt guns
Pearl Palms	tidal surfing	crab summoner	wears sun visor	sandy blond	bright spotlights
Current Chris	sandcastle blast	crab summoner	wears sun visor	sandy blond	bright spotlights
Coast Brody	sandcastle blast	seaweed lasso	wears sun visor	sandy blond	squirt guns
Wade Waters	sandcastle blast	seaweed lasso	wears sun visor	neon pink	bright spotlights
Reef Rivera	tidal surfing	coconut launcher	wears sun visor	sandy blond	bright spotlights
Finn Splash	sunbeam flashing	seaweed lasso	wears sunglasses	neon pink	bright spotlights
Summer Skye	sunbeam flashing	coconut launcher	wears sun visor	neon pink	bright spotlights
Anchor Alex	dune leaping	crab summoner	wears sun visor	neon pink	bright spotlights
Cove Miller	wave riding	seaweed lasso	wears sun visor	sandy blond	bright spotlights
Salty Sam	sandcastle blast	flip flop flinger	wears sunglasses	neon pink	bright spotlights
Gull Gary	sunbeam flashing	seaweed lasso	wears sunglasses	sandy blond	squirt guns
Captain Coral	sandcastle blast	seaweed lasso	wears sun visor	neon pink	cold ice cream
Sunny Ray	wave riding	seagull whistle	wears sun visor	neon pink	bright spotlights
Beacon Blake	wave riding	flip flop flinger	wears sunglasses	neon pink	cold ice cream
Baylor Beach	sunbeam flashing	seagull whistle	wears sun visor	sandy blond	squirt guns
Breeze Baker	dune leaping	seagull whistle	wears sun visor	neon pink	bright spotlights

CLUE 1 Skip counting

You count sets of wet footprints along the shore in equal jumps to discover where the thief fled.

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

T																T
16	35	45	110	9	39	39	20	9	10	55	25	45	60	10	25	16
30	60	45	20	15	12	20	21	60	30	80	80	25	10	45	12	

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 → **T**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 → **E**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **L**

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 → **I**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **V**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 → **D**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **N**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **O**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **B**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **S**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **M**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **R**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 → **A**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **H**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 → **C**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 → **U**

Scratch space:

CLUE 2 Rounding

The digital tide radar rounds the boat speed to the nearest ten to give a quick reading.

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

W									W								
80	600	300	50	60	400	400	400	9000	80	9000	400	30	400	3000	60	2000	300

W															
80	60	9000	5000	600	50	200	9000	400	30	50	500	600	400	40	5000

Round 84 to the nearest ten → **W**

Round 31 to the nearest ten → **U**

Round 475 to the nearest hundred → **V**

Round 4,706 to the nearest thousand → **R**

Round 9,251 to the nearest thousand → **A**

Round 2,214 to the nearest thousand → **C**

Round 48 to the nearest ten → **N**

Round 645 to the nearest hundred → **I**

Round 3,455 to the nearest thousand → **P**

Round 59 to the nearest ten → **E**

Round 305 to the nearest hundred → **T**

Round 432 to the nearest hundred → **S**

Round 40 to the nearest ten → **O**

Round 171 to the nearest hundred → **G**

Scratch space:

CLUE 3 Addition

You add up the lost sand buckets gathered from three different lifeguard stands.

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

T																		T	
371	623	605	589	788	634	851	688	850	788	850	605	688	566	851	920	589	623	371	
			T					T		T			T			T			
850	522	270	371	697	920	589	623	371	850	371	270	850	371	270	522	371	623	605	540

$207 + 164 = \square \rightarrow$ T	$274 + 423 = \square \rightarrow$ L	$362 + 272 = \square \rightarrow$ A
$279 + 641 = \square \rightarrow$ I	$313 + 209 = \square \rightarrow$ P	$279 + 409 = \square \rightarrow$ D
$252 + 314 = \square \rightarrow$ B	$209 + 414 = \square \rightarrow$ H	$152 + 118 = \square \rightarrow$ O
$480 + 371 = \square \rightarrow$ R	$294 + 295 = \square \rightarrow$ G	$288 + 317 = \square \rightarrow$ E
$239 + 549 = \square \rightarrow$ U	$178 + 362 = \square \rightarrow$ M	$368 + 482 = \square \rightarrow$ S

Scratch space:

CLUE 4

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

P															P				
612	633	452	623	123	516	896	633	393	482	148	482	516	633	482	612	623	482	538	
179	390	623	250	390	333	333	179	516	595	123	516	482	516						

$$833 - 221 = \boxed{} \rightarrow \boxed{\text{P}}$$

$257 - 134 = \square \rightarrow \boxed{\text{C}}$

$$656 - 174 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$479 - 229 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$603 - 270 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$643 - 191 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$324 - 176 = \boxed{} \rightarrow \boxed{\text{D}}$$

$1147 - 251 = \boxed{} \rightarrow \boxed{\text{F}}$

$785 - 392 = \boxed{} \rightarrow \boxed{\text{U}}$

$$678 - 162 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$635 - 97 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$496 - 317 = \boxed{} \rightarrow \boxed{\text{H}}$$

$737 - 114 = \square \rightarrow \square$

$757 - 124 = \boxed{} \rightarrow \boxed{0}$

$$669 - 279 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$860 - 265 = \boxed{} \rightarrow \boxed{\text{S}}$$

Scratch space:

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

You divide the remaining rescue whistles evenly among the patrol guards.

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:

$108 \div 12 = \boxed{}$

$144 \div 12 = \boxed{}$

$7 \div 7 = \boxed{}$

$48 \div 12 = \boxed{}$

$36 \div 6 = \boxed{}$

$77 \div 11 = \boxed{}$

$40 \div 4 = \boxed{}$

$56 \div 7 = \boxed{}$

$27 \div 9 = \boxed{}$

$20 \div 4 = \boxed{}$

$11 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain leaped over the high dunes, then blew a loud seagull whistle.
2. The villain flashed a bright sunbeam, then launched hard coconuts.
3. The villain flashed a bright sunbeam, then blew a loud seagull whistle.
4. The villain surfed the high tide, then flung extra flip flops.
5. The villain flashed a bright sunbeam, then flung extra flip flops.
6. The villain rode a giant wave, then swung a long seaweed lasso.
7. The villain blasted a sandcastle, then flung extra flip flops.
8. The villain leaped over the high dunes, then summoned pinch crabs.
9. The villain rode a giant wave, then blew a loud seagull whistle.
10. The villain blasted a sandcastle, then blew a loud seagull whistle.
11. The villain rode a giant wave, then launched hard coconuts.
12. The villain blasted a sandcastle, then swung a long seaweed lasso.

Answer Key

The Mystery of Sunken Shell Cove

Culprit: Summer Skye

sunbeam flashing · coconut launcher · wears sun visor · neon pink · bright spotlights

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

Clue 1 (Skip counting): "THE VILLAIN DOES NOT USE A CRAB SUMMONER"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (L) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (V) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (M) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 = 30 (U)

Clue 2 (Rounding): "WITNESS SAW A SUSPECT WEARING A SUN VISOR"

Round 84 to the nearest ten = 80 (W) · Round 31 to the nearest ten = 30 (U) · Round 475 to the nearest hundred = 500 (V) · Round 4,706 to the nearest thousand = 5000 (R) · Round 9,251 to the nearest thousand = 9000 (A) · Round 2,214 to the nearest thousand = 2000 (C) · Round 48 to the nearest ten = 50 (N) · Round 645 to the nearest hundred = 600 (I) · Round 3,455 to the nearest thousand = 3000 (P) · Round 59 to the nearest ten = 60 (E) · Round 305 to the nearest hundred = 300 (T) · Round 432 to the nearest hundred = 400 (S) · Round 40 to the nearest ten = 40 (O) · Round 171 to the nearest hundred = 200 (G)

Clue 3 (Addition): "THE GUARDS USED BRIGHT SPOTLIGHTS TO STOP THEM"

$207 + 164 = 371$ (T) · $274 + 423 = 697$ (L) · $362 + 272 = 634$ (A) · $279 + 641 = 920$ (I) · $313 + 209 = 522$ (P) · $279 + 409 = 688$ (D) · $252 + 314 = 566$ (B) · $209 + 414 = 623$ (H) · $152 + 118 = 270$ (O) · $480 + 371 = 851$ (R) · $294 + 295 = 589$ (G) · $288 + 317 = 605$ (E) · $239 + 549 = 788$ (U) · $178 + 362 = 540$ (M) · $368 + 482 = 850$ (S)

Clue 4 (Subtraction): "POLICE FOUND NEON PINK HAIR AT THE SCENE"

$833 - 221 = 612$ (P) · $257 - 134 = 123$ (C) · $656 - 174 = 482$ (N) · $479 - 229 = 250$ (R) · $603 - 270 = 333$ (T) · $643 - 191 = 452$ (L) · $324 - 176 = 148$ (D) · $1147 - 251 = 896$ (F) · $785 - 392 = 393$ (U) · $678 - 162 = 516$ (E) · $635 - 97 = 538$ (K) · $496 - 317 = 179$ (H) · $737 - 114 = 623$ (I) · $757 - 124 = 633$ (O) · $669 - 279 = 390$ (A) · $860 - 265 = 595$ (S)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Summer Skye

$108 \div 12 = 9$ · $144 \div 12 = 12$ · $7 \div 7 = 1$ · $48 \div 12 = 4$ · $36 \div 6 = 6$ · $77 \div 11 = 7$ · $40 \div 4 = 10$ · $56 \div 7 = 8$ · $27 \div 9 = 3$ · $20 \div 4 = 5$ · $11 \div 1 = 11$