

# Pirate's Predicament

## Grade 2 Number Sense



# Teacher resources

## Preparation

- Print pages 3-9 for students.
- Feel free to create a booklet or to give students one worksheet at a time to solve.
- Students should always have page 4, “Possible Hiding Spots,” nearby to cross off rows as they solve the clues.

## How to Use

- Read through the story on page 3, “The Pirate’s Predicament,” to create excitement over helping Pirate Pete find his treasure!
- Explain that from each worksheet, students will solve a clue. They will use that clue to cross off some possible hiding spots on page 4 until only one is left.
- When they are done, students should fill out the “Final Report” on page 9 for you to check!

## Answers:

- Solutions are on pages 11-19. Following each worksheet’s solution is a page with the relevant rows crossed off. The final solution is on page 19.

## Awards

- Two copies of an awards certificate are available on page 20. Consider having students complete all problems (even if they solve the mystery early) to earn the award!

# The Pirate's Predicament

Arghhh Matey, thanks for joining me today. I could sure use yer help. You see, I came to this here island to deposit me treasure. I buried it good so that no land lover will ever find it.

But there be a problem, matey. After I buried the treasure I took a small nap under a coconut tree. Little did I know a coconut would fall from the tree and strike me on the head.

When I woke up, by me own pirate beard I cannot remember where I put my treasure. I would look on me treasure map but I did not finish making one!

I am in need of some mystery solving pirate detectives. Will ye help me?

Thank ya kindly! I know of possible hiding spots but need yer help.

There is not much time so ye must hurry and help me solve the clues so that I can find me treasure. Use all of yer math skills and solve me Pirate Predicament. Arghh!!



Oh one more thing. I am supposed to be on vacation right now so please, hurry!

# Possible Hiding Spots

A	B	C	D	E
west	blanket	stripes	red	a rock
east	beachball	polka dots	green	sand
west	beachball	polka dots	red	sand
west	blanket	stripes	red	a rock
east	umbrella	stripes	red	sand
west	beachball	polka dots	green	sand
east	umbrella	stripes	blue	a rock
west	blanket	stripes	blue	sand
east	umbrella	stripes	red	a rock
west	beachball	polka dots	green	a rock
west	blanket	polka dots	blue	a rock
west	beachball	stripes	green	sand
east	blanket	polka dots	blue	a rock
east	umbrella	stripes	green	a rock
east	umbrella	polka dots	red	a rock
west	umbrella	polka dots	green	sand
east	blanket	stripes	red	a rock
west	blanket	polka dots	blue	a rock

The treasure is in the \_\_\_\_\_ part of the beach near a  
A

\_\_\_\_\_ with \_\_\_\_\_, buried under \_\_\_\_\_.  
D B C E

# Skip Counting - Clue 1

Find the first clue by completing the skip counting problems below. Match your answers to put the letter in the box with the matching number (there may be more than one). The first one has been done for you!

--	--	--	--

45      105      70      40

			<b>c</b>	
--	--	--	----------	--

35      45      105      8      95

--	--	--

50      105      70

--	--	--

40      60      60

<b>c</b>							
----------	--	--	--	--	--	--	--

8      100      60      50      12      45      12

--	--

40      60

--	--	--	--

95      10      12      45

--	--	--	--	--	--	--	--

40      100      45      105      70      30      100      45

2, 4, 6, 8,           ,             
C                    I                    D

5, 10, 15, 20, 25,           ,           ,             
U                    B                    T

10, 20, 30, 40,           ,           ,             
W                    O                    S

80, 85, 90,           ,           ,             
H                    R                    A

5, 15, 25,           ,             
E

# Place Value - Clue 2

In the grid below are a bunch of clues. Only one is correct.

Only one of the numbers in the grid is described by the bullets below. Figure out which number is correct to figure out which clue is correct!

- There is an odd number in the ones digit.
- There is **not** an 8 in the hundreds digit.
- There is **not** a 2 in the hundreds digit.
- There is a 1 in the tens digit.

<b>815</b> A beachgoer remembers seeing something sparkling under a rock.	<b>517</b> Pirate Pete tripped over a beach ball after he hid the treasure.	<b>909</b> There was lots of sand everywhere!
<b>227</b> Pirate Pete doesn't remember seeing anything with stripes nearby.	<b>644</b> There were a bunch of empty beach towels nearby.	<b>872</b> Pirate Pete doesn't remember seeing anything blue nearby.
<b>219</b> The colors of the polka dots were so bright!	<b>195</b> Pirate Pete feels sore from having to lift up some rocks.	<b>463</b> Pirate Pete got a sunburn without any umbrellas nearby.

# Expanded Form - Clue 3

Pirate Pete remembers something! Help figure out the third clue by filling in the equations. Match your answers to put the letter in the box with the matching number (there may be more than one).



--

10

--	--	--	--	--

2

325

10

900

700

--	--	--	--	--

2

325

0

20

0

--	--	--	--

752

0

20

0

--	--	--	--	--

206

471

4

700

5

--	--	--	--

800

471

2

690

$$300 + 20 + 5 = \underline{\hspace{2cm}}$$

H

$$\underline{\hspace{2cm}}_N + \underline{\hspace{2cm}}_I + \underline{\hspace{2cm}}_L = 914$$

$$700 + 50 + 2 = \underline{\hspace{2cm}}$$

W

$$\underline{\hspace{2cm}}_D + \underline{\hspace{2cm}}_R + \underline{\hspace{2cm}}_A = 825$$

$$600 + 90 = \underline{\hspace{2cm}}$$

S

$$\underline{\hspace{2cm}}_K + \underline{\hspace{2cm}}_E + \underline{\hspace{2cm}}_T = 702$$

$$200 + 6 = \underline{\hspace{2cm}}$$

P

$$400 + 70 + 1 = \underline{\hspace{2cm}}$$

O

# Comparing Numbers - Clue 4

In the grid below are a bunch of clues. Most of them are not correct. Cross off all the boxes that do not compare the numbers correctly. The rest of the clues are correct.

<b>815 &lt; 799</b>  A beachgoer remembers seeing something sparkling under a rock.	<b>517 = 507</b>  Pirate Pete remembers it was near his favorite color, blue.	<b>91 &lt; 291</b>  There was lots of sand everywhere!
<b>220 &gt; 302</b>  There wasn't a single rock anywhere!	<b>644 &lt; 466</b>  There were a bunch of empty beach towels nearby.	<b>872 &gt; 782</b>  Pirate Pete doesn't remember seeing anything blue nearby.
<b>219 &lt; 919</b>  Pirate Pete doesn't remember seeing anything red nearby.	<b>195 = 190</b>  Pirate Pete feels sore from having to lift up some rocks.	<b>463 &gt; 600</b>  The striped umbrellas were really colorful!
<b>929 &lt; 209</b>  Pirate Pete can't remember the color, but it wasn't green.	<b>79 &gt; 421</b>  There weren't many beachgoers, since it was so rocky.	<b>463 &gt; 600</b>  There wasn't a beach ball in sight.



# Final Report



Detective Name: \_\_\_\_\_

Your Solution:

The treasure is in the \_\_\_\_\_ part of the beach near a  
A  
\_\_\_\_\_ with \_\_\_\_\_ ,  
D B C  
buried under \_\_\_\_\_ .  
E

Clue  
Checklist:

Clue 1

Clue 2

Clue 3

Clue 4

Teacher Check:

Well done! You helped Pirate Pete find his buried treasure! Now let's just hope he makes a map before he forgets again. Great work!!

Oops! No treasure there. Go back, check your clues, and try again!

# Pirate's Predicament

## Solution



# Skip Counting - Clue 1

Find the first clue by completing the skip counting problems below. Match your answers to put the letter in the box with the matching number (there may be more than one). The first one has been done for you!

e	a	s	t
---	---	---	---

45      105      70      40

b	e	a	c	h
---	---	---	---	---

35      45      105      8      95

w	a	s
---	---	---

50      105      70

t	o	o
---	---	---

40      60      60

c	r	o	w	d	e	d
---	---	---	---	---	---	---

8      100      60      50      12      45      12

t	o
---	---

40      60

h	i	d	e
---	---	---	---

95      10      12      45

t	r	e	a	s	u	r	e
---	---	---	---	---	---	---	---

40      100      45      105      70      30      100      45

2, 4, 6,  $\frac{8}{C}$ ,  $\frac{10}{I}$ ,  $\frac{12}{D}$

5, 10, 15, 20, 25,  $\frac{30}{U}$ ,  $\frac{35}{B}$ ,  $\frac{40}{T}$

10, 20, 30, 40,  $\frac{50}{W}$ ,  $\frac{60}{O}$ ,  $\frac{70}{S}$

80, 85, 90,  $\frac{95}{H}$ ,  $\frac{100}{R}$ ,  $\frac{105}{A}$

5, 15, 25,  $\frac{35}{E}$ ,  $\frac{45}{E}$

All locations that are EAST should be crossed off the list.

# Possible Hiding Spots

A	B	C	D	E
west	blanket	stripes	red	a rock
east	beachball	polka dots	green	sand
west	beachball	polka dots	red	sand
west	blanket	stripes	red	a rock
east	umbrella	stripes	red	sand
west	beachball	polka dots	green	sand
east	umbrella	stripes	blue	a rock
west	blanket	stripes	blue	sand
east	umbrella	stripes	red	a rock
west	beachball	polka dots	green	a rock
west	blanket	polka dots	blue	a rock
west	beachball	stripes	green	sand
east	blanket	polka dots	blue	a rock
east	umbrella	stripes	green	a rock
east	umbrella	polka dots	red	a rock
west	umbrella	polka dots	green	sand
east	blanket	stripes	red	a rock
west	blanket	polka dots	blue	a rock

The treasure is in the \_\_\_\_\_ part of the beach near a  
A

\_\_\_\_\_ with \_\_\_\_\_, buried under \_\_\_\_\_.  
D B C E

# Place Value - Clue 2

In the grid below are a bunch of clues. Only one is correct.

Only one of the numbers in the grid is described by the bullets below. Figure out which number is correct to figure out which clue is correct!

- There is an odd number in the ones digit.
- There is **not** an 8 in the hundreds digit.
- There is **not** a 2 in the hundreds digit.
- There is a 1 in the tens digit.

<p><b>815</b></p> <p>A beachgoer remembers seeing something sparkling under a rock.</p>	<p><b>517</b></p> <p>Pirate Pete tripped over a beach ball after he hid the treasure.</p>	<p><b>909</b></p> <p>There was lots of sand everywhere!</p>
<p><b>227</b></p> <p>Pirate Pete doesn't remember seeing anything with stripes nearby.</p>	<p><b>644</b></p> <p>There were a bunch of empty beach towels nearby.</p>	<p><b>872</b></p> <p>Pirate Pete doesn't remember seeing anything blue nearby.</p>
<p><b>219</b></p> <p>The colors of the polka dots were so bright!</p>	<p><b>195</b></p> <p>Pirate Pete feels sore from having to lift up some rocks.</p>	<p><b>463</b></p> <p>Pirate Pete got a sunburn without any umbrellas nearby.</p>

All locations that do NOT have a BEACH BALL should be crossed off the list.

# Possible Hiding Spots

A	B	C	D	E
west	blanket	stripes	red	a rock
east	beachball	polka dots	green	sand
west	beachball	polka dots	red	sand
west	blanket	stripes	red	a rock
east	umbrella	stripes	red	sand
west	beachball	polka dots	green	sand
east	umbrella	stripes	blue	a rock
west	blanket	stripes	blue	sand
east	umbrella	stripes	red	a rock
west	beachball	polka dots	green	a rock
west	blanket	polka dots	blue	a rock
west	beachball	stripes	green	sand
east	blanket	polka dots	blue	a rock
east	umbrella	stripes	green	a rock
east	umbrella	polka dots	red	a rock
west	umbrella	polka dots	green	sand
east	blanket	stripes	red	a rock
west	blanket	polka dots	blue	a rock

The treasure is in the \_\_\_\_\_ part of the beach near a  
A

\_\_\_\_\_ with \_\_\_\_\_, buried under \_\_\_\_\_.  
D B C E

# Expanded Form - Clue 3

The pirate remembers something! Help figure out the third clue by filling in the equations. Match your answers to put the letter in the box with the matching number (there may be more than one).



i
---

10

t	h	i	n	k
---	---	---	---	---

2

325

10

900

700

t	h	e	r	e
---	---	---	---	---

2

325

0

20

0

w	e	r	e
---	---	---	---

752

0

20

0

p	o	l	k	a
---	---	---	---	---

206

471

4

700

5

d	o	t	s
---	---	---	---

800

471

2

890

$$300 + 20 + 5 = \frac{325}{H}$$

$$\frac{900}{N} + \frac{10}{I} + \frac{4}{L} = 914$$

$$700 + 50 + 2 = \frac{752}{W}$$

$$\frac{800}{D} + \frac{20}{R} + \frac{5}{A} = 825$$

$$600 + 90 = \frac{690}{S}$$

$$\frac{700}{K} + \frac{0}{E} + \frac{2}{T} = 702$$

$$200 + 6 = \frac{206}{P}$$

$$400 + 70 + 1 = \frac{471}{O}$$

All locations that do NOT have POLKA DOTS should be crossed off the list.

# Possible Hiding Spots

A	B	C	D	E
west	blanket	stripes	red	a rock
east	beachball	polka dots	green	sand
west	beachball	polka dots	red	sand
west	blanket	stripes	red	a rock
east	umbrella	stripes	red	sand
west	beachball	polka dots	green	sand
east	umbrella	stripes	blue	a rock
west	blanket	stripes	blue	sand
east	umbrella	stripes	red	a rock
west	beachball	polka dots	green	a rock
west	blanket	polka dots	blue	a rock
west	beachball	stripes	green	sand
east	blanket	polka dots	blue	a rock
east	umbrella	stripes	green	a rock
east	umbrella	polka dots	red	a rock
west	umbrella	polka dots	green	sand
east	blanket	stripes	red	a rock
west	blanket	polka dots	blue	a rock

The treasure is in the \_\_\_\_\_ part of the beach near a  
A

\_\_\_\_\_ with \_\_\_\_\_, buried under \_\_\_\_\_.  
D B C E



# Comparing Numbers - Clue 4

In the grid below are a bunch of clues. Most of them are not correct. Cross off all the boxes that do not compare the numbers correctly. The rest of the clues are correct.

<del> <math>815 &lt; 799</math>  A beachgoer remembers seeing something sparkling under a rock. </del>	<del> <math>517 = 507</math>  Pirate Pete remembers it was near his favorite color, blue. </del>	$91 < 291$ There was lots of sand everywhere!
<del> <math>220 &gt; 302</math>  There wasn't a single rock anywhere! </del>	<del> <math>644 &lt; 466</math>  There were a bunch of empty beach towels nearby. </del>	$872 > 782$ Pirate Pete doesn't remember seeing anything blue nearby.
$219 < 919$ Pirate Pete doesn't remember seeing anything red nearby.	<del> <math>195 = 190</math>  Pirate Pete feels sore from having to lift up some rocks. </del>	<del> <math>463 &gt; 600</math>  The striped umbrellas were really colorful! </del>
<del> <math>929 &lt; 209</math>  Pirate Pete can't remember the color, but it wasn't green. </del>	<del> <math>79 &gt; 421</math>  There weren't many beachgoers, since it was so rocky. </del>	<del> <math>463 &gt; 600</math>  There wasn't a beach ball in sight. </del>

All locations that have something BLUE or RED should be crossed off the list.

All locations that do NOT have SAND should be crossed off the list.

# Possible Hiding Spots

A	B	C	D	E
west	blanket	stripes	red	a rock
east	beachball	polka dots	green	sand
west	beachball	polka dots	red	sand
west	blanket	stripes	red	a rock
east	umbrella	stripes	red	sand
west	beachball	polka dots	green	sand
east	umbrella	stripes	blue	a rock
west	blanket	stripes	blue	sand
east	umbrella	stripes	red	a rock
west	beachball	polka dots	green	a rock
west	blanket	polka dots	blue	a rock
west	beachball	stripes	green	sand
east	blanket	polka dots	blue	a rock
east	umbrella	stripes	green	a rock
east	umbrella	polka dots	red	a rock
west	umbrella	polka dots	green	sand
east	blanket	stripes	red	a rock
west	blanket	polka dots	blue	a rock

The treasure is in the \_\_\_\_\_ part of the beach near a  
A

\_\_\_\_\_ with \_\_\_\_\_, buried under \_\_\_\_\_.  
D B C E

# Solution

A	B	C	D	E
west	blanket	stripes	red	a rock
east	beachball	polka dots	green	sand
west	beachball	polka dots	red	sand
west	blanket	stripes	red	a rock
east	umbrella	stripes	red	sand
west	beachball	polka dots	green	sand
east	umbrella	stripes	blue	a rock
west	blanket	stripes	blue	sand
east	umbrella	stripes	red	a rock
west	beachball	polka dots	green	a rock
west	blanket	polka dots	blue	a rock
west	beachball	stripes	green	sand
east	blanket	polka dots	blue	a rock
east	umbrella	stripes	green	a rock
east	umbrella	polka dots	red	a rock
west	umbrella	polka dots	green	sand
east	blanket	stripes	red	a rock
west	blanket	polka dots	blue	a rock

The treasure is in the **WEST** part of the beach near a

**GREEN** **BEACH BALL** with **POLKA DOTS**, buried under **SAND**.



# CERTIFICATE OF ACHIEVEMENT

AWARDED TO

For solving the

**Pirate's Predicament**



Mage Math

Mage Math



# CERTIFICATE OF ACHIEVEMENT

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Mage Math

Mage Math

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