


Place Value Question 12

Objective: I can say one more and one less than a 4 digit

Assessment Question

Prior Learning:

	Question 12: I can find 1 more or 1 less than a number	I feel
Answer these sums:		
$947 + 1 =$	$654 - 1 =$	
$2034 + 1 =$	$1398 - 1 =$	
$8769 + 1 =$	$4550 - 1 =$	
$7599 + 1 =$	$6000 - 1 =$	

Teacher Notes:

Once the children have organised and grouped objects over a thousand, ensure that the children have regular opportunities to count from different 4 digit numbers. Explore counting forward and back in ones from different 4 digit amounts and ensure that the children have opportunities to cross boundaries of ten, hundred and thousand.

Explore counting from different numbers as a class. Discuss the pattern in numbers and which numbers are easy to count on and back from and which ones are more difficult. Use a place value chart for children who are having difficulty with crossing boundaries of ten. Objects or base ten can also be used alongside examples to model making a new group of ten and that is why a digit in the next column may change. Also explore how this works when subtracting and counting backwards.

Practice Activities

Purple Practice: most suited for children who showed difficulty in Question 12 of the prior learning assessment and will benefit from focusing on 3 and low 4 digit amounts.

In the purple task the children are presented with number blocks that have 3 or 4 digit amounts displayed. In the green boxes the children are required to write the number before and after the one displayed on the purple block. If children are having difficulty with this the use of a place value chart or objects grouped as ten, hundred and thousand may help children to add one more and to see that in these examples that it is only the one that changes.

Green Practice: Most suited for children who made some errors in Question 12 and will benefit from completing sequences with numbers over 1000.

For the green task the children are presented with number blocks that have a sequence of numbers presented on them. The children are required to fill in the missing amounts in each sequence, counting both on and back in ones. If children are having difficulty with this, the use of a place value chart or objects grouped as ten, hundred and thousand may help. Children to add one more and to notice that in these examples the ten, hundred and thousand do not change.

Yellow Practice: Most suited for children who show accuracy in top section of Question 12 however make errors when presented with amounts where they are required to cross a ten or hundred or thousand boundary (the last 2 addition and subtraction questions).

The yellow activity is presented in the same way as the green activity, however the number blocks provided encourage the children to cross a ten, hundred or thousand boundary when either one is added or subtracted.

Mastery: - Problem solving

The children are given a problem to solve involving house numbers which they are asked to work out where Sorayah lives. The children can apply their knowledge of counting on and back with numbers over 1000. Some children will be able to work this out mentally and some children may need to label the house numbers underneath the picture provided to help them to solve the problem. Encourage the children to talk about their strategies for solving the problem. Encourage the children to look carefully at the vocabulary used and work out that there are 2 possibilities for Sorayah's house number. A further challenge is provided for the children to work out the house number if all of the houses on that side of the road were odd.

Answers:

Purple: a) 563, 564, 565

b) 786, 787, 788

c) 961, 962, 963

d) 1044, 1045, 1046

e) 1177, 1178, 1179

f) 1113, 1114, 1115

g) 3854, 3855, 3856

h) 1292, 1293, 1294

i) 2455, 2456, 2457

j) 3512, 3513, 3514

Green:

1) 3421, 3422, 3423, 3424, 3425, 3426

2) 5339, 5340, 5341, 5342, 5343, 5344

3) 5675, 5676, 5677, 5678, 5679, 5680

4) 6719, 6718, 6717, 6716, 6715, 6714

5) 8001, 8002, 8003, 8004, 8005, 8006

6) 2200, 2199, 2198, 2197, 2196, 2195

7) 9991, 9992, 9993, 9994, 9995, 9996

8) 6809, 6810, 6811, 6812, 6813, 6814

Yellow:

1) 2116 2117 2118 2119 2120 2121

2) 5005 5006 5007 5008 5009 5010

3) 3449 3450 3451 3452 3453 3454

4) 6202 6201 6200 6199 6198 6197

5) 8093 8092 8091 8090 8089 8088

6) 8997 8998 8999 9000 9001 9002

7) 998 999 1000 1001 1002 1003

8) 4503 4502 4501 4500 4499 4498

Mastery:

Sorayah could either live at house number 1999 or 1993

Look at the number written on each purple block. Write the number before and the number after in the green boxes.

a)

<input type="text"/>	564	<input type="text"/>
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b)

<input type="text"/>	787	<input type="text"/>
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c)

<input type="text"/>	962	<input type="text"/>
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d)

<input type="text"/>	1045	<input type="text"/>
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e)

<input type="text"/>	1178	<input type="text"/>
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f)

<input type="text"/>	1114	<input type="text"/>
----------------------	------	----------------------

g)

<input type="text"/>	3855	<input type="text"/>
----------------------	------	----------------------

h)

<input type="text"/>	1293	<input type="text"/>
----------------------	------	----------------------

i)

<input type="text"/>	2456	<input type="text"/>
----------------------	------	----------------------

j)

<input type="text"/>	3513	<input type="text"/>
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ones	
tens	
hundreds	

Look at each number sequence. Can you work out the missing numbers?

- 1)

3421	3422	3423	3424		
- 2)

5339	5340	5341			
- 3)

			5678	5679	5680
- 4)

			6716	6715	6714
- 5)

8001	8002			8005	8006
- 6)

2200	2199	2198			
- 7)

	9992		9994		9996
- 8)

6809	6810				6814

Look at each number sequence. Can you work out the missing numbers?

- 1)

2116	2117	2118	2119		
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- 2)

5005	5006	5007			
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- 3)

			3452	3453	3454
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- 4)

			6199	6198	6197
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- 5)

8093	8092			8089	8088
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- 6)

8997	8998	8999			
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- 7)

	999		1001		1003
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- 8)

4503	4502				
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Mastery

Problem Solving



Sorayah, Oliver and Jack all live on the same street.

Sorayah lives 3 houses away from Jack. Jack lives 7 houses before Oliver. Oliver lives at house number 2003.



What number house does Sorayah live at?

Challenge:

What if all house numbers on that side of the street were odd?
Which number would Sorayah live at?

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