Sample Pages

Beta

Lesson 11 Rounding To Hundreds

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Beta builds on the foundation in Alpha by applying students' mastery of single-digit addition and subtraction to multipledigit addition and subtraction. One of the stepping stones between these two levels is the concept of Place Value, which is an important milestone for truly grasping any multiple-digit operation.

These Beta Sample Pages will give you an idea of Math-U-See's unique method of instruction. However, the cornerstone of Math-U-See's success in teaching Multiple-Digit Addition & Subtraction and other topics is our multi-sensory approach to maths instruction. Integrated Manipulative Blocks and Lessonby-Lesson videos are used in every lesson throughout the Beta Level to incorporate kinaesthetic, visual and auditory learning.

If you believe that Beta is the level for your student to begin, please confirm this by completing our free online placement tests.

To Your Success!!





Instruction Manual: Lesson 11 - Rounding to Hundreds

Rounding to Hundreds Multiple-Digit Addition with Regrouping

As we have been doing and always will do, add the units first. There may come a time when a student is so proficient at adding multiple digit numbers that he will add from the left, but this is down the road and not the way the decimal system operates. At this juncture, always add from right to left, from smaller to larger. Remember that you add units to units, tens to tens, and hundreds to hundreds. Whenever you add two numbers, always add the same values. "To combine, you must be the same kind." Here are two examples followed by the same problems worked out with place value notation and regular notation. If you have lined paper I suggest you turn it sideways to help keep the values in the proper places.

Rounding and Estimating to Hundreds

When adding large numbers, encourage the student to estimate the answer before solving it. We have learned how to round and estimate to the tens place, and now we want to increase our understanding by rounding and estimating to the hundreds place.

When you round a number to the nearest multiple of 100, there will be a number in the hundreds place but only a zero in the tens and units places, which are to the right of the hundreds place. It doesn't matter what numbers are present in the other place values, only the number to the immediate right of the place value being considered—in this case the tens place. This number determines whether to stay the same or be increased by one. I tell the students this is why we call it rounding, because the tens and units are going to be a "round" zero.

Example 1

Round 383 to the nearest hundreds place.

The first step is to find the two multiples of a hundred that are nearest to 383. The lower one is 300 and the higher one is 400; 383 is between 300 and 400. If the student has trouble finding these numbers, begin by placing your finger over the 83, so that all you have is a 3 in the hundreds place, which is 300. Then add one more to the hundreds to find the 400. I often write the numbers 300 and 400 above the number 383 on both sides as in figure 1.

Look at the number in the tens place. Does it fall in 0 through 4 or in 5 through 9? Since it is an 8, it is in the latter group, which means we round up to the next number, 400. Rounded to the nearest hundred, 383 is 400.

Example 2

Round 547 to the nearest hundreds place.

500 600 1. Find the multiples of one hundred nearest to 547. 500 547 600 2. We know that 4 goes to the lower number, 500.

In examples 3 and 4, the estimates are to the right in parentheses.



Example 3 (continued) Five units plus 8 units equals 13, which is 1 ten and 3 units. We move the ten (or carry it) to the tens place as indicated by the arrow. Then 6 tens plus 3 tens plus the 1 ten from the result of adding in the units place equals 1 hundred. The 1 hundred is moved to the hundreds place as shown by the second arrow. Adding all the hundreds gives us the answer of 4 hundreds, 0 tens, and 3 units or 403. The picture below shows the result after regrouping.



Example 4





465 = 400 + 60 + 5

465

Student Text: Lesson Practice 11A

Round to the nearest hundreds place.

- 1. 190 → ____
 2. 206 → ____
- 3. 355 → _____

Round to the nearest hundred and estimate the answer. Then find the exact answer. The first one is done for you.

4.	1 1 3 6 4 <u>+ 2 9 7</u> 6 6 1	(400) + (300) (700)	5. 628 <u>+175</u>	(+ (()))
6.	359 +254	() + () ()	7. 537 <u>+233</u>	(+ (()))
8.	168 +452	() + () ()	9. 123 <u>+88</u>	(+ (())

Student Text: Lesson Practice 11A

10. 676 () 11. 299 ()

$$+145$$
 $+($) $+($) $+311$ $+($)
()

12. First, 124 lights burned out on the big Christmas tree in town. Then 176 more lights burned out. How many lights need to be replaced?

Student Text: Lesson Practice 11B

Round to the nearest hundreds place.

- 1. 476 → ____
 2. 515 → _____
- 3. 610 → _____

Round to the nearest hundred and estimate the answer. Then find the exact answer.

4.	359 +126	(+ (())	5.	138 +212	(+ (()))
6.	157 +142	(+ (()))	7.	2 2 7 + 3 9	(+ (()))
8.	4 4 9 + 1 3 7	(+ (()))	9.	235 +145	(+ (()))

Student Text: Lesson Practice 11B

10.
$$109$$
 () 11. 416 ()
 $+207$ $+()$ $+()$ $+329$ $+()$
()

12. On Monday Steve read 123 pages of his book. On Tuesday he read 169 pages. How many pages has he read in all?

Student Text: Lesson Practice 11C

Round to the nearest hundreds place.

- 1. 450 → ____ 2. 103 → ____
- 3. 278 → _____

Round to the nearest hundred and estimate the answer. Then find the exact answer.

4.	2 1 7 + 3 2 4	(+ (()))	5.	266 +18	(+ (()))
6.	134 +365	(+ (()))	7.	119 +207	(+ (()))
8.	555 +348	(+ (()))	9.	806 +106	(+ (())

Student Text: Lesson Practice 11C

10. 119 () 11. 248 ()

$$+217$$
 $+()$ $+()$ $+252$ $+()$ ()

12. On our trip to Grandma's house, Dad drove 263 kilometres and Mom drove 179 kilometres. How far is it to Grandma's house?

Student Text: Systematic Review 11D

Round to the nearest hundreds place.

 1. $755 \rightarrow$ 2. $115 \rightarrow$

 Add. Regroup if needed.
 4. 2 4 8

 3. 8 0 6 4. 2 4 8

 $\pm 10 6$ $\pm 2 5 2$

 5. 337 6. 54

 ± 172 ± 28

 7. 53 8. 18

Review subtraction facts. These problems review subtracting 0, 1, and 2.

+ 2 9

9. 1 10. 10 <u>-1</u> <u>-2</u>

+ 37

Student Text: Systematic Review 11D

11.	8 <u>- 1</u>		12.	3 0
13.	4 3		14.	6 - 2
15.	5 - 4		16.	8 - 2

Skip count by two and write the numbers.

- Andrew has five dollars and twenty-six cents. Write that amount with a decimal point and dollar sign.
- 19. We traveled 55 kilometres last week and 78 kilometres this week. How many kilometres did we travel those two weeks?
- 20. Jim had \$145 in his savings. He got \$56 for his birthday. How much money does Jim have now?

Student Text: Systematic Review 11E

Round to the nearest hundreds place.

1. 361 → ____ 2. 209 → ____

Add. Regroup if needed.

3.	235	4.	300
	+ 3 6 5		+ 4 0 9
5.	249	6.	28
	+ 1 3 2		+ 3 8
7.	65	8.	58
	+ 3 5		+ 4 2

Review subtraction facts. These problems review subtracting 0, 1, and 2.

9. 4 10. 7 <u>- 2</u> <u>- 2</u>

Student Text: Systematic Review 11E

- 11.
 3
 12.
 11

 -1
 -2
- 13.
 6
 14.
 8

 <u>-5</u>
 <u>-0</u>
- 15.
 10
 16.
 9

 ____9
 ___2

Skip count by five and write the numbers.

- 18. A tree grew 17 centimetres one year and 9 centimetres the next year. How much did it grow during those two years?
- 19. Captain Cook spotted 138 penguins in the water and 256 on the shore. How many penguins were spotted by Captain Cook?
- 20. Mom has five eggs. Two of the eggs are cracked. How many are not cracked? (Watch for word problems that review subtraction.)

Student Text: Systematic Review 11F

Round to the nearest hundreds place.

 1. 519 → ____
 2. 682 → ____

Add. Regroup if needed.

3.	429	4.	1	0	1
	+ 2 6 6		+	8	9

5.	238	6.	9	2
	+ 2 4 3		+	8

7.	48	8.	6	3
	+ 3 2	<u>-</u>	+ 2	7

Review subtraction facts. These problems review subtracting by 2 and difference of 2.

9.	5	10.	10
	- 3		- 2

11.	7 _ 5		12.	6 _ 2	
13.	9 _ 7		14.	8 _ 2	
15.	10 - 8		16.	11 - 9	

Skip count by ten and write the numbers.

17. ____, ____, 40, ____, ____, ____, ____, ____, ____, ____,

- 18. Deb has 21 red sweets and 48 green sweets. Round to the nearest 10 and estimate how many sweets she has.
- Pete drove 512 kilometres one day and 345 the next day. How far did he drive? Estimate first, and then solve.
- 20. Drew lost eight dollars. If he finds six dollars, how many dollars are still lost? Write your answer with a decimal point and dollar sign.

Test Booklet: Lesson 11 Test

Round to the nearest hundreds place.

1. $126 \rightarrow ___$ 2. $314 \rightarrow ___$ 3. $509 \rightarrow ___$

Add. Regroup if needed.

- 4.
 1
 3
 2
 5.
 6
 7
 9

 + 4
 1
 8
 + 2
 7
 6
- 6.
 5 2 0 7.
 8 7

 +1 8 8 +2 8
- 8. 45+ 429. 39+ 15

Review your subtraction facts.

 10.
 7
 11.
 5

 -2 -1

Test Booklet: Lesson 11 Test

12.	8 - 0	13.	11 <u>-9</u>
14.	5 <u>- 3</u>	15.	10 - 2
16.	6 - 1	17.	7 5

Skip count by five and write the numbers.

18. ____, ____, ____, 25, ____, ____, ____, ____, ____, ____

- 19. Cameron had 476 stamps in his collection at the beginning of the year. Since then he has collected 125 more. How many stamps does he have now? Estimate first, and then solve.
- 20. Sara is six years old. How many years is it until she is ten?

Solutions: Lesson 11

Lesson Practice 11A

1.	200
2.	200
3.	400
4.	done
5.	$ \begin{array}{r} 11\\ (600) & 628\\ \underline{+(200)}\\ (800) & \underline{+175}\\ 803 \end{array} $
6.	$ \begin{array}{r} 11\\ (400) & 359\\ +(300) & +254\\ \hline (700) & -613 \end{array} $
7.	$ \begin{array}{r} 1 \\ (500) & 537 \\ \underline{+(200)} & \underline{+233} \\ (700) & 770 \end{array} $
8.	$ \begin{array}{r} 11\\(200) & 168\\(+(500)) & +452\\(700) & 620\end{array} $
9.	$ \begin{array}{r} 11\\(100) & 123\\ +(100) & + & 88\\\hline (200) & 211 \end{array} $
10.	$ \begin{array}{r} 11\\(700) & 676\\(+(100)) & +145\\(800) & 821\end{array} $
11.	$ \begin{array}{r} 11\\(300) & 299\\ +(300) & +311\\ \hline (600) & 610 \end{array} $

12. 124 + 176 = 300 lights

Solutions: Lesson 11

Lesso	on Pract	tice 11B		1	
1.	500		4.	(200) 217	
2.	500			+(300) $+324$	
3.	600			(500) 541	
4.	(400) + (100) (500)	1 359 <u>+126</u> 485	5.	$ \begin{array}{r} 1 \\ (300) & 266 \\ +(000) & +18 \\ \hline (300) & 284 \\ \end{array} $	
5.	(100) +(200)	1 138 +212 250	6.	$\begin{array}{c} (100) & 134 \\ +(400) & +365 \\ \hline (500) & 499 \end{array}$	
6.	(300) (200) +(100) (300)	157 +142 299	7.	$ \begin{array}{r}1\\100) & 119\\ +(200) & +207\\ \hline (300) & 326\end{array} $	
7.	(200) +(000) (200)	1 227 <u>+ 39</u> 266	8.	$ \begin{array}{r} 11\\ (600) 555\\ \underline{+(300)}\\ (900) 903 \end{array} $	
8.	(400) +(100) (500)	1 449 <u>+137</u> 586	9.	$ \begin{array}{r} 1 \\ (800) \\ \underline{+(100)} \\ (900) \\ \end{array} \\ \begin{array}{r} 1 \\ \underline{+106} \\ 912 \\ \end{array} $	
9.	(200) +(100) (300)	1 235 <u>+145</u> 380	10.	$ \begin{array}{r} 1 \\ (100) & 119 \\ \underline{+(200)} & \underline{+217} \\ (300) & 336 \\ \end{array} $	
10.	(100) +(200) (300)	1 109 <u>+207</u> 316	11.	$ \begin{array}{r} 11\\(200) & 248\\ +(300) & +252\\ \hline (500) & 500 \end{array} $	
11.	(400) +(300) (700)	1 416 <u>+329</u> 745	12.	263+179 = 442 km	
12.	123+16	9 = 292 pages	Syste	ematic Review 11	D
	-	, 5**	1.	800	_
			2.	100	
				1	
Lesso 1. 2.	on Pract 500 100	tice 11C	3.	806 <u>+ 106</u> 9 12	
3.	300		4.	11 248 <u>+252</u> 500	

5.	1 337 <u>+172</u>	8.	1 58 <u>+42</u>
6.	509 1 54 <u>+28</u> 82	9. 10. 11.	4-2=2 7-2=5 3-1=2
7.	1 53 <u>+37</u> 90	12. 13. 14. 15.	11-2 = 9 6-5 = 1 8-0 = 8 10-9 = 1
8.	1 18 <u>+29</u> 47	16. 17. 18. 19	9-2=7 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 17+9=26 cm 138+256 = 394 perguins
9.	1 - 1 = 0	19.	$F_{2} = 2 \text{ args}$
10.	10 - 2 = 8	20.	3-2=3 eggs
11.	8 – 1 = 7		
12.	3 - 0 = 3		
13.	4 - 3 = 1	6	
14	6 - 2 = 4	Syste	matic Review 11F
15	5 - 4 - 1	1.	500
16	8 2 - 6	2.	700
10.	3 - 2 = 0		1
17.	2, 4, 0, 0, 10, 12, 14, 10, 10, 20	3.	429
18.	\$5.25		$\frac{+266}{605}$
19.	55 + 78 = 133 km		695
20.	\$145+\$56 = \$201	4.	$ \begin{array}{r} 1 \\ 10 \\ \frac{+ 89}{190} \\ 1 \end{array} $
Syste	ematic Review 11E	5	238
1.	400	5.	<u>+243</u>
2	200		481
2.	11		1
3	235	6.	92
	+ 365		$\frac{+8}{100}$
	600		100
4.	300 <u>+409</u> 709	7.	
5.	1 249 <u>+132</u> 381	8.	1 63 <u>+27</u> 90
6.	$ \begin{array}{r} 1\\ 28\\ \underline{+38}\\ \overline{66}\end{array} $	9. 10. 11.	5-3=2 10-2=8 7-5=2
7.	1 65 <u>+35</u> 100	12. 13. 14.	6-2 = 4 9-7 = 2 8-2 = 6

Solutions: Lesson 11

- 15. 10 8 = 2
- 16. 11 9 = 2
- 17. 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
- 18. (20) + (50) = (70) sweets
- 19. (500) + (300) = (800)
- 512+345 = 857 km
- 20. 8-6=2 dollars = \$2.00

Solutions: Lesson 11 Test

1.	100			
2. 3.	300 500			
4.	1			
	132 <u>+418</u> 550			
5.	11 679			
	<u>+276</u> 955			
6.	1			
	<u>+ 188</u> 708			
7.	1			
	87			
	<u>+ 28</u> 115			
8.	45			
	<u>+42</u> 87			
9.	1			
	39			
	<u>+15</u> 54			
10.	7 – 2 = 5			
11.	5 - 1 = 4			
12.	8 - 0 = 8			
13.	11 - 9 = 2			
14.	5 - 3 = 2			
15.	10 - 2 = 8			
16.	6 - 1 = 5			
17.	7 - 5 = 2			
18.	5, 10, 15, 20, 25, 30, 35, 40, 45, 50			
19.	(500) + (100) = (600)			
	476+125 = 601 stamps			

20. 10 - 6 = 4 years



CONTACT

02 9094 3390 / 08 6311 5998 info@mathsaustralia.com.au

WWW.MATHSAUSTRALIA.COM.AU