Rounding Numbers

When rounding whole numbers there are 2 rules to remember:

I will use the term rounding digit - which means: When asked to round to the closest tens - your rounding digit is the second number to the left (ten's place) when working with whole numbers. When asked to round to the nearest hundred - the third place from the left is the rounding digit (hundreds place).

Rule 1. Determine what your rounding digit is and look to the right side of it. If the digit is 0,1,2,3 or 4 do not change the rounding digit. All digits that are on the right hand side of the requested rounding digit will become 0

Rule 2. Determine what your rounding digit is and look to the right of it. If the digit is 5,6,7, 8 or 9, your rounding digit rounds up by one number. All digits that are on the right hand side of the requested rounding digit will become 0

Rounding with decimals: When rounding numbers involving decimals, there are 2 rules to remember:

- **Rule 1.** Determine what your rounding digit is and look to the right side of it. If that digit is 4,3, 2 or 1, simply drop all digits to the right of it.
- **Rule 2**. Determine what your rounding digit is and look to the right side of it. If that digit is 5, 6, 7, 8 or 9 add one to the rounding digit and drop all digits to the right of it.
- **Rule 3**: *Some teachers prefer this method:*

This rule provides more accuracy and is sometimes referred to as the 'Banker's Rule'. When the first digit dropped is 5 and there are no digits following or the digits following are zeros, make the preceding digit even (i.e. round off to the nearest even digit). E.g., 2.315 and 2.325 are both 2.32 when rounded off to the nearest hundredth. **Note:** The rationale for the third rule is that approximately half of the time the number will be rounded up and the other half of the time it will be rounded down.

Examples:

765.3682 becomes:

1000 when asked to round to the nearest thousand (1000)

800 when asked to round to the nearest hundred (100)

770 when asked to round to the nearest ten (10)

765 when asked to round to the nearest one (1)

765.4 when asked to round to the nearest tenth (10th)

765.37 when asked to round to the nearest hundredth (100th.)

765.368 when asked to round to the nearest thousandth (1000th)

Name:_____

Date: _____

Rounding Numbers

When rounding, the digit to the right of the requested rounding digit will always tell you whether to round up or down and all digits to the left will stay the same.

Rule 1 Determine what your rounding digit is and look to the right side of it. If the digit is 1,2,3 or 4 do not change the rounding digit. All digits that are on the right hand side of the requested rounding digit will become .

Rule 2. Determine what your rounding digit is and look to the right of it. If the digit is 5,6,7, 8 or 9, your rounding digit rounds up by one number. All digits that are on the right hand side of the requested rounding digit will become 0.

Round to the nearest 10 - Examples: 43 = 40 257 = 260 1490 = 1490 1375 = 1380

(Rounding digit is in the tens place)

1.) 47 _____	2.) 51 _____	3.) 65 _____	4.) 22 _____
5.) 43 _____	6.) 99 _____	7) 86 _____	8.) 28 _____
9.) 77 _____	10. 24 _____	11.) 55 _____	12.) 21 _____
13.) 21 _____	14.) 56 _____	15.) 94 _____	16.) 88 _____
17.) 11 _____	18.) 16 _____	19.) 15 _____	20.) 33 _____

Round to the nearest 10

1.) 407 _____	2.) 4 51 _____	3.) 635 _____	4.) 225 _____
5.) 432 _____	6.) 929 _____	7) 806 _____	8.) 328 _____
9.) 677 _____	10. 245 _____	11.) 551 _____	12.) 218 _____
13.) 291 _____	14.) 556 _____	15.) 394 _____	16.) 888 _____
17.) 11 1 _____	18.) 616 _____	19.) 125 _____	20.) 336 _____

Rounding Whole Numbers **Name:**_____

1. Round to the nearest thousand:

   1) 14 389 _____ 4) 9 520 _____

   2) 29 610 _____ 5) 56 239 _____

   3) 3 492 _____ 6) 89 743 _____

2. Round to the nearest ten thousand:

   1) 24 987 _____ 4) 24 033 _____

   2) 37 096 _____ 5) 295 474 _____

   3) 145 302 _____ 6) 77 330 _____

3. Round to the nearest ten:

   1) 89 _____ 4) 514 _____

   2) 2 673 _____ 5) 97 _____

   3) 265 _____ 6) 2 753 _____

4. Round to the nearest hundred:

   1) 847 _____ 4) 333 _____

   2) 2 978 _____ 5) 5 496 _____

   3) 5 048 _____ 6) 555 _____

5. Round to the nearest hundred thousand:

   1) 929 689 _____ 4) 754 300 _____

   2) 103 232 _____ 5) 222 678 _____

   3) 965 123 _____ 6) 449 987 _____

Rounding Numbers With Decimals **Name:**_____

1. Round to the nearest tenth:

   1) 12.642 _____ 4) 3.44 _____

   2) 29.10 _____ 5) 5.239 _____

   3) 2.492 _____ 6) 89.43 _____

2. Round to the nearest hundredth:

   1) 23.987 _____ 4) 44.043 _____

   2) 3.7096 _____ 5) 999.474 _____

   3) 4.449 _____ 6) 7.44430 _____

3. Round to the nearest thousandth:

   1) .99989 _____ 4) 66.514 _____

   2) .2673 _____ 5) .2297 _____

   3) .3265 _____ 6) 3.2753 _____

4. Round to the nearest tenth:

   1) 8947 _____ 4) 3.33 _____

   2) 3.978 _____ 5) 54.96 _____

   3) 9.048 _____ 6) 55.56 _____

5. Round to the nearest hundredth:

   1) 99.689 _____ 4) 755.300 _____

   2) 13.232 _____ 5) 222.678 _____

   3) 6.5123 _____ 6) 499.987 _____