Name _____ Date _____

Division: Listing Multiples

List multiples for the divisor when you are solving division problems so you can quickly find the best factor in this standard algorithm approach. Directions:

1. List the product for the divisor times a factor (10, 100, etc.) of your choice.
2. Double the product and factor twice to create a list of multiples.
3. Circle the closest multiple to the dividend and follow the standard algorithm.
4. Continue steps 1-4 until your dividend is less than the divisor.
5. Answer the open-response question after each division problem.

Standard Algorithm

4,938 ÷ 19

$$
\begin{array}{r}
259\text{R}17 \\
19\overline{)4938} \\
-3800 \\
\hline
1138 \\
-\ 950 \\
\hline
188 \\
-\ 171 \\
\hline
17
\end{array}
$$

Listed Multiples

___ x 19 =	# close to 4,938?	___ x 19 =	# close to 1,138?
100 x 19 = 1900		10 x 19 = 190	
200 x 19 = 3800 ✓		20 x 19 = 380	
400 x 19 = 7600		30 x 19 = 570	
		40 x 19 = 760	
		50 x 19 = 950 ✓	
		60 x 19 = 1,140	

The multiples of 19 _____. There are _____ sets of listed multiples _____ and _____. I think listing multiples is_____.

1. Standard Algorithm

2,122 ÷ 13

Listed Multiples

What x 13 = a number close to 2,122?

_____ x 13 = 1300
__200__ x 13 = _____
_____ x 13 = _____

What x 13 = # close to _____?
_____ x 13 = 130
_____ x 13 = _____
_____ x 13 = __39__
_____ x 13 = _____
__50__ x 13 = _____
_____ x 13 = _____
_____ x 13 = _____

What x 13 = # close to _____?
__5__ x 13 = __65__
__4__ x 13 = _____
_____ x 13 = __39__

Do you think listing the multiples is helpful? Why or why not?

Name _____ Date _____

2.	Standard Algorithm	Listed Multiples
	$1{,}906 \div 10$	

Do you think listing the multiples is helpful? Why or why not?