

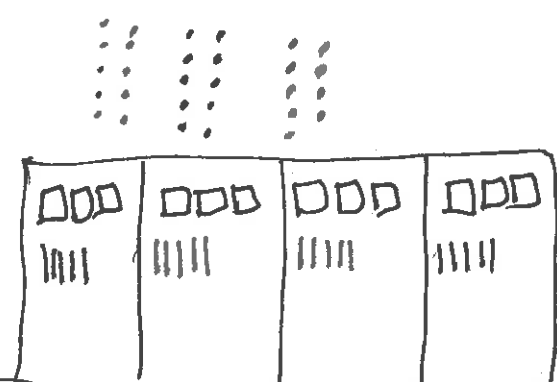
Long Division and Scaffolding Division

Example:

name: _____

class time: _____

	$5 \overline{) 1634}$	<p>Take out the base 10 blocks for the number being divided (the dividend), and make groups to show the amount divided by (divisor)</p>
		<p>There aren't enough thousands to put one in each group, so trade the thousand for 10 hundreds. That gives us <u>16</u> hundreds</p>
	$\begin{array}{r} 3 \\ 5 \overline{) 1634} \\ -15 \\ \hline 13 \end{array}$	<p>Distribute hundreds evenly to the groups. There will be <u>3</u> hundreds in each group (write the hundreds place of the quotient). In all we distributed <u>15</u> hundreds (write that they are used), so there is 1 hundred left (write difference)</p>
		<p>We can't distribute any more hundreds, so we trade our remaining hundred for 10 tens. This give us <u>13</u> tens (write the 3 tens next to the 1 hundred remaining to show 13 tens)</p>
	$\begin{array}{r} 32 \\ 5 \overline{) 1634} \\ -15 \\ \hline 13 \\ -10 \\ \hline 34 \end{array}$	<p>Distribute as many tens as we can to the groups. In all, we put <u>2</u> tens in each group (write in tens place of the quotient). In all, we used <u>10</u> tens (write that in the work space), and there are 3 tens left (write that as the difference)</p>
		<p>We can't distribute any more tens, so we trade each of the 3 tens for 10 ones. Now we have 34 ones. Write the 4 ones next to the 3 for 3 tens to show <u>34</u> ones are left</p>
	$\begin{array}{r} 326R4 \\ 5 \overline{) 1634} \\ -15 \\ \hline 13 \\ -10 \\ \hline 34 \\ -30 \\ \hline 4 \end{array}$	<p>Distribute as many ones as we can evenly to the groups. There are <u>6</u> ones in each group (write in quotient). In all we used <u>30</u> ones (write in work space), and there are <u>4</u> left (write as the difference and as the remainder).</p>

<p>2. Draw what the manipulatives would look at this point in the long division algorithm.</p> 	$\begin{array}{r} 35 \\ 4 \overline{) 1429} \\ \underline{-12} \\ 22 \\ \underline{-20} \\ 29 \end{array}$	<p>Explain what each of the numbers represents in the manipulatives and the problem:</p> <p>a. What is 4? number of groups</p> <p>b. What is 35? 300 in each box and 5 tens in each box</p> <p>c. What is 29? 29 ones waiting to be distributed</p>
<p>3. Draw what the manipulatives would look at this point in the long division algorithm.</p>	$\begin{array}{r} 4 \\ 6 \overline{) 2729} \\ \underline{-24} \\ 32 \end{array}$	<p>Explain what each of the numbers represents in the manipulatives and the problem:</p> <p>a. What is 6?</p> <p>b. What is 4?</p> <p>c. What is 32?</p>
<p>4. Draw what the manipulatives would look at this point in the long division algorithm.</p>	$\begin{array}{r} 26 \\ 3 \overline{) 805} \\ \underline{-6} \\ 20 \\ \underline{-18} \\ 25 \end{array}$	<p>Explain what each of the numbers represents in the manipulatives and the problem:</p> <p>a. What is 3?</p> <p>b. What is 26?</p> <p>c. What is 25?</p>

300 in each group
20 in each group

$$\begin{array}{r} 324 \text{ R3} \\ 5 \overline{)1623} \end{array}$$

$$\underline{15}$$

10s to share

→

$$12$$

$$\underline{10}$$

← shared out

ones to share

→

$$23$$

$$\underline{20}$$

3 ← leftover