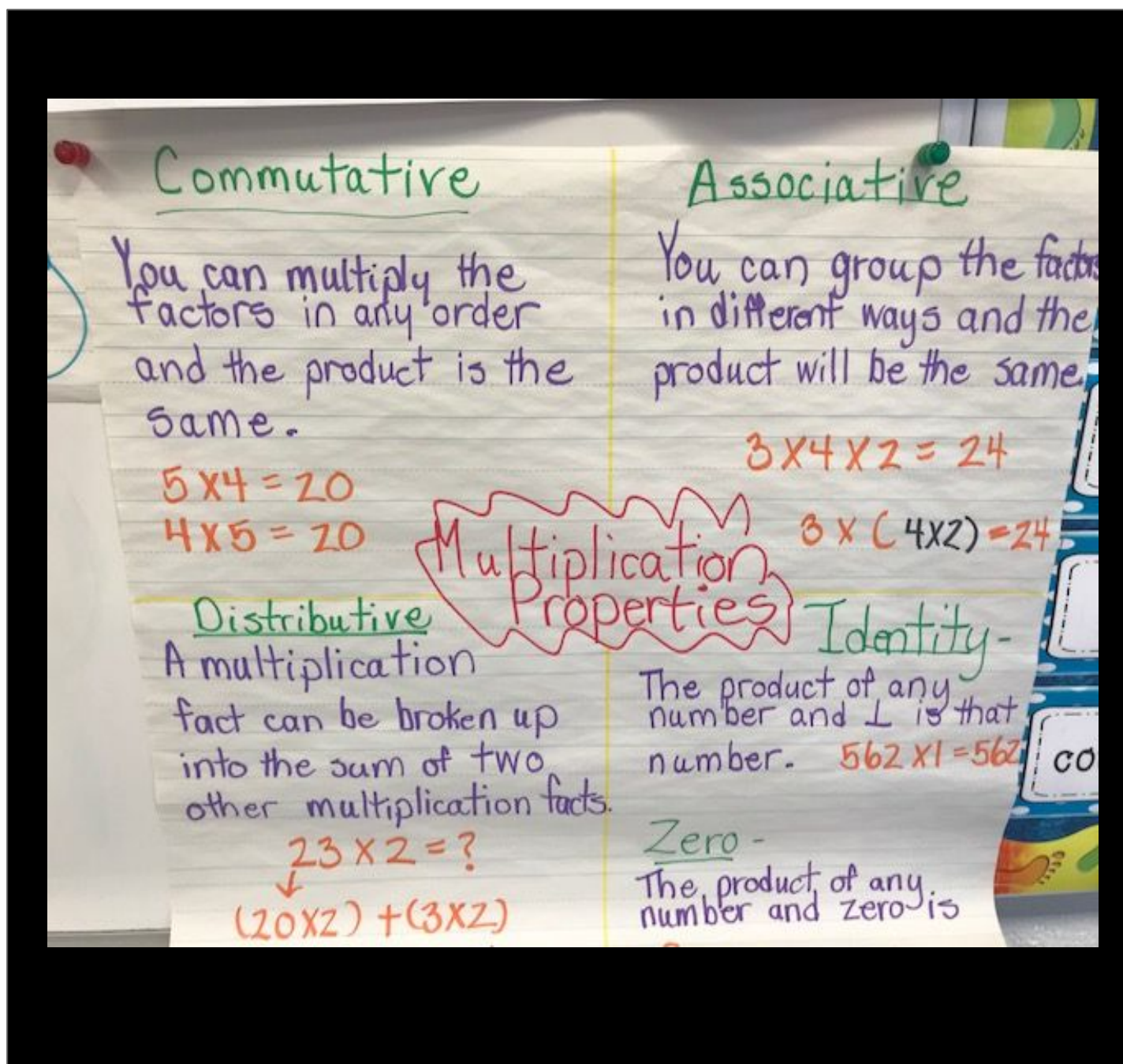


NUMBER AND OPERATIONS - BASE TEN

NC.4.NBT.5	Multiply a whole number of up to three digits by a one-digit whole number, and multiply up to two two-digit numbers with place value understanding using area models, partial products, and the properties of operations. Use models to make connections and develop the algorithm.
DESCRIPTION	This chart demonstrates the properties of multiplication in kid-friendly language, along with actual examples of the properties in action.



NUMBER AND OPERATIONS - BASE TEN

NC.4.NBT.5	Multiply a whole number of up to three digits by a one-digit whole number, and multiply up to two two-digit numbers with place value understanding using area models, partial products, and the properties of operations. Use models to make connections and develop the algorithm.
DESCRIPTION	This anchor chart demonstrates four different strategies for students to use when multiplying.

Multiplication Strategies

Partial Product
 3×16 (20+6)
Area model showing 30 and 18
 $30 + 18 = 48$

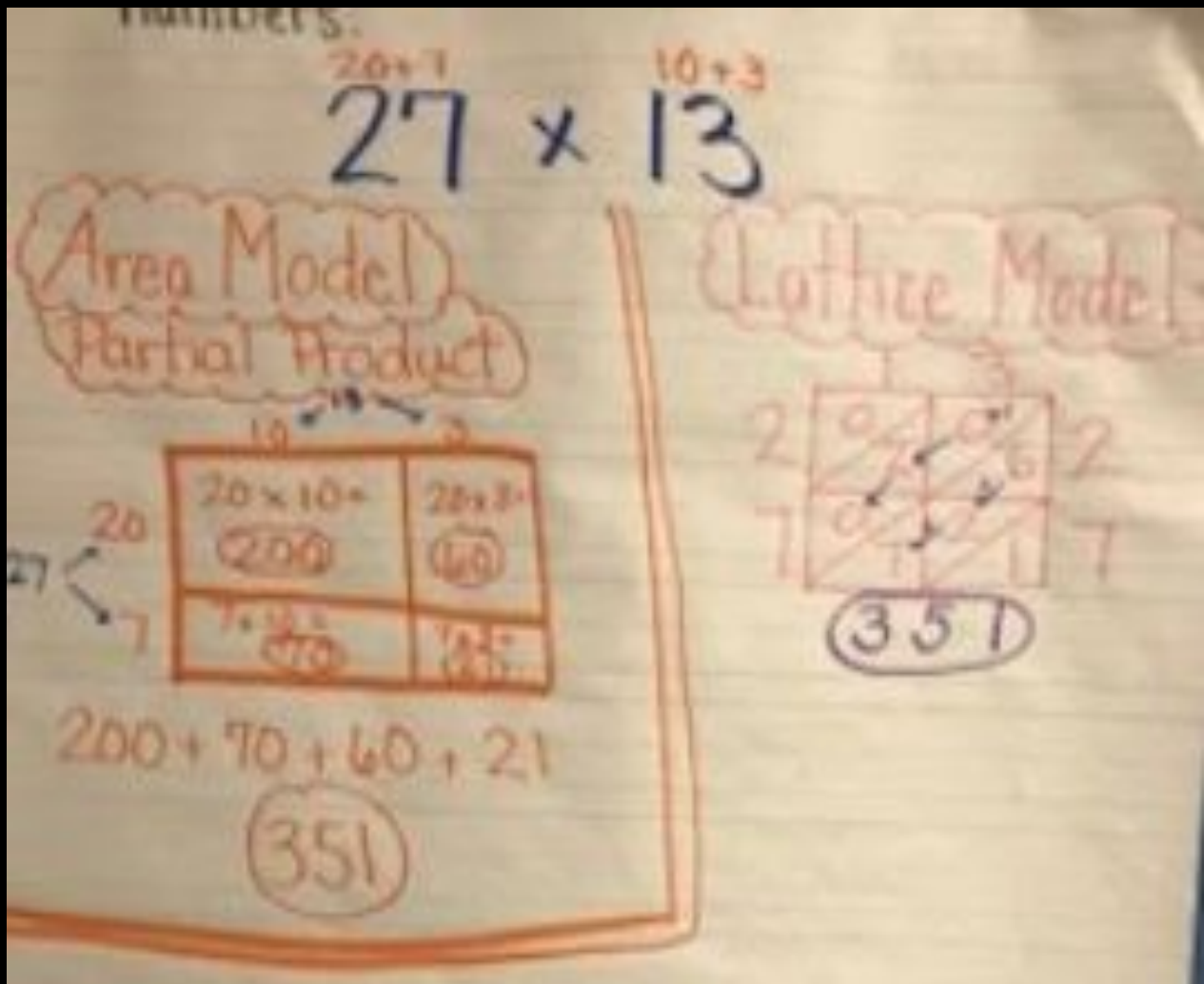
Partial Product
 $(20+3) 23 \times 6$
Area model showing 18 and 120
 $18 + 120 = 138$

Place Value
 23×6
 $20 \times 6 = 120$
 $3 \times 6 = 18$
 138

Distributive
 23×6
 $(20 \times 6) + (3 \times 6)$
 $120 + 18$
 138

NUMBER AND OPERATIONS - BASE TEN

NC.4.NBT.5	Multiply a whole number of up to three digits by a one-digit whole number, and multiply up to two two-digit numbers with place value understanding using area models, partial products, and the properties of operations. Use models to make connections and develop the algorithm.
DESCRIPTION	In this anchor chart, there are two models for how to multiply two two-digit numbers. Both models are effective ways to arrive at solutions for multiplication. It is important when using the Lattice Model that students understand the place value of the numbers in the model.



NUMBER AND OPERATIONS - BASE TEN

<p>NC.4.NBT.5</p>	<p>Multiply a whole number of up to three digits by a one-digit whole number, and multiply up to two two-digit numbers with place value understanding using area models, partial products, and the properties of operations. Use models to make connections and develop the algorithm.</p>
<p>DESCRIPTION</p>	<p>This teacher created chart showcases both partial products and area models for multiplication. It also gives four different examples of how students may choose to multiply in fourth grade.</p>

Multiplication Multiple Ways!

<p>By 1 - Partial Products</p> <p>$389 \times 5 = ?$</p> <p> $300 \times 5 = 1500$ $80 \times 5 = 400$ $9 \times 5 = 45$ </p> <p style="text-align: right;"> $\begin{array}{r} 1500 \\ + 400 \\ + 45 \\ \hline 1,945 \end{array}$ </p> <p style="text-align: center;">1,945</p>	<p>By 2 - Partial Products</p> <p>$47 \times 35 =$</p> <p> $40 \times 30 = 1200$ $7 \times 30 = 210$ $40 \times 5 = 200$ $7 \times 5 = 35$ </p> <p style="text-align: right;"> $\begin{array}{r} 1200 \\ + 210 \\ + 200 \\ + 35 \\ \hline 1,645 \end{array}$ </p> <p style="text-align: center;">1,645</p>																					
<p>By 1 - Area Model</p> <p>$389 \times 5 = ?$</p> <p> $\begin{array}{r} \times 300 + 80 + 9 \\ 5 \\ \hline \end{array}$ </p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">300×5</td> <td style="padding: 5px;">80×5</td> <td style="padding: 5px;">9×5</td> </tr> <tr> <td style="padding: 5px;">\downarrow</td> <td style="padding: 5px;">\downarrow</td> <td style="padding: 5px;">\downarrow</td> </tr> <tr> <td style="padding: 5px; text-align: center;">1500</td> <td style="padding: 5px; text-align: center;">400</td> <td style="padding: 5px; text-align: center;">45</td> </tr> </table> <p style="text-align: right;"> $\begin{array}{r} 1500 \\ + 400 \\ + 45 \\ \hline 1,945 \end{array}$ </p> <p style="text-align: center;">1,945</p>	300×5	80×5	9×5	\downarrow	\downarrow	\downarrow	1500	400	45	<p>By 2 - Area Model</p> <p>$47 \times 35 =$</p> <p> $\begin{array}{r} \times 40 + 7 \\ 30 \\ 5 \\ \hline \end{array}$ </p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">40×30</td> <td style="padding: 5px;">30×7</td> </tr> <tr> <td style="padding: 5px;">\downarrow</td> <td style="padding: 5px;">\downarrow</td> </tr> <tr> <td style="padding: 5px; text-align: center;">1200</td> <td style="padding: 5px; text-align: center;">210</td> </tr> <tr> <td style="padding: 5px;">5×40</td> <td style="padding: 5px;">5×7</td> </tr> <tr> <td style="padding: 5px;">\downarrow</td> <td style="padding: 5px;">\downarrow</td> </tr> <tr> <td style="padding: 5px; text-align: center;">200</td> <td style="padding: 5px; text-align: center;">35</td> </tr> </table> <p style="text-align: right;"> $\begin{array}{r} 1200 \\ + 210 \\ + 200 \\ + 35 \\ \hline 1,645 \end{array}$ </p> <p style="text-align: center;">1,645</p>	40×30	30×7	\downarrow	\downarrow	1200	210	5×40	5×7	\downarrow	\downarrow	200	35
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