

# Table of Contents

<b>Preface</b> .....	<b>v</b>
<b>Computational Skills: What Is the Task?</b> .....	<b>1</b>
<b>Introducing Computational Skills with Whole Numbers.</b> . . .	<b>4</b>
<i>Using materials</i> .....	<i>6</i>
<i>Teaching approaches</i> .....	<i>7</i>
<i>Other approaches to teaching addition and subtraction</i> .....	<i>8</i>
<i>Other approaches to teaching multiplication</i> .....	<i>10</i>
<i>Which algorithm for division?</i> .....	<i>12</i>
<i>Separately or simultaneously?</i> .....	<i>13</i>
<i>Difficulty levels of basic facts.</i> .....	<i>13</i>
<i>Using mathematical sentences</i> .....	<i>14</i>
<i>Subtraction with renaming.</i> .....	<i>15</i>
<b>Reinforcing Computational Skills with Whole Numbers.</b> . . .	<b>18</b>
<b>Maintaining Computational Skills with Whole Numbers</b> . . .	<b>21</b>
<b>Transferring Computational Skills with Whole Numbers</b> . . .	<b>26</b>
<b>Applying Computational Skills with Whole Numbers.</b> . . . . .	<b>27</b>
<b>Introducing Computational Skills with Fractions</b> .....	<b>29</b>
<i>Using materials</i> .....	<i>30</i>
<i>Finding the least common denominator</i> .....	<i>32</i>
<i>Algorithms for the division of fractions</i> .....	<i>33</i>
<i>Which should come first: fractions or decimals?</i> .....	<i>36</i>
<i>Metric implementation.</i> .....	<i>37</i>
<b>Reinforcing Computational Skills with Fractions</b> .....	<b>38</b>
<i>Drill, grouping, and the differentiation of materials.</i> .....	<i>38</i>
<i>Error analyses</i> .....	<i>40</i>
<i>Motivation.</i> .....	<i>41</i>

<b>Maintaining Computational Skills with Fractions. . . . .</b>	<b>43</b>
<i>Loss of skills over the summer months. . . . .</i>	<i>43</i>
<i>Homework and the feedback of information . . . . .</i>	<i>43</i>
<b>Transferring Computational Skills with Fractions . . . . .</b>	<b>45</b>
<b>Applying Computational Skills with Fractions . . . . .</b>	<b>47</b>
<b>Conclusion. . . . .</b>	<b>49</b>
<b>References . . . . .</b>	<b>51</b>