

## National Mathematics Advisory Panel Final Report

<b>Key Target Skills</b>	<b>Related PAL-II Subtests</b>
Conceptual Understanding	<ul style="list-style-type: none"> <li>• Oral Counting</li> <li>• Place Value</li> <li>• Part-Whole Relationships (Time)</li> </ul>
Computational Fluency	<ul style="list-style-type: none"> <li>• Fact Retrieval</li> <li>• Computation Operations</li> <li>• Finding the Bug</li> </ul>
Problem Solving	<ul style="list-style-type: none"> <li>• Multi-Step Problem Solving</li> <li>• Place Value (Part C)</li> <li>• Part-Whole Relationships (Time)</li> <li>• Quantitative Working Memory</li> </ul>
<b>Other Targeted Skills</b>	<b>Related PAL-II Subtests</b>
<b>Number Sense</b> (page 27, NMAP)	
Basic Counting Skills	<ul style="list-style-type: none"> <li>• Oral Counting</li> </ul>
Place Value	<ul style="list-style-type: none"> <li>• Place Value</li> </ul>
Basic Arithmetic Operations (addition, subtraction, multiplication, division)	<ul style="list-style-type: none"> <li>• Math Fact Retrieval</li> <li>• Computation Operations</li> </ul>
<b>Fluency with whole numbers</b> (page 17, NMAP)	
Place Value	<ul style="list-style-type: none"> <li>• Place Value</li> </ul>
Basic Operations (Algorithms)	<ul style="list-style-type: none"> <li>• Fact Retrieval</li> <li>• Computation Operations</li> <li>• Finding the Bug</li> </ul>
Applying Operations to Problem Solving	<ul style="list-style-type: none"> <li>• Multi-Step Problem Solving</li> <li>• Place Value (Part C)</li> <li>• Part-Whole Relationships (Time)</li> <li>• Quantitative Working Memory</li> </ul>
Automatic Recall of Number Facts	<ul style="list-style-type: none"> <li>• Fact Retrieval</li> </ul>
<b>Fluency with Fractions and Decimals</b> (page 18, NMAP)	

Part-Whole Relationships (fractions and mixed numbers)	<ul style="list-style-type: none"> <li>• Part-Whole Fractions and Mixed Numbers</li> </ul>
Place Value (whole numbers + decimals)	<ul style="list-style-type: none"> <li>• Place Value</li> </ul>
<b>Number Line Representations</b> (page 29, NMAP)	Many of the recommended interventions in the <i>PAL-II M Test Administration Manual</i> and <i>PAL-II User Guides</i> involve number line representations.