






## Summary of recommendations

<div>1</div> <div></div> <div>Develop educators' understanding of how children learn mathematics</div> <div><ul style="list-style-type: none"><li>Professional development should be used to raise the quality of educators' knowledge of mathematics, of children's mathematical development and of effective mathematical pedagogy</li><li>Developmental progressions show us how children typically learn mathematical concepts and can inform teaching</li><li>Educators should be aware that developing a secure grasp of early mathematical ideas takes time, and specific skills may emerge in different orders</li><li>The development of self-regulation and metacognitive skills are linked to successful learning in early mathematics</li></ul></div>	<div>2</div> <div></div> <div>Dedicate time for children to learn mathematics and integrate mathematics throughout the day</div> <div><ul style="list-style-type: none"><li>Dedicate time to focus on mathematics each day</li><li>Explore mathematics through different contexts, including storybooks, puzzles, songs, rhymes, puppet play, and games</li><li>Make the most of moments throughout the day to highlight and use mathematics, for example, in daily routines, play activities, and other curriculum areas</li><li>Seize chances to model and reinforce mathematical vocabulary</li><li>Create opportunities for extended discussion of mathematical ideas with children</li></ul></div>	<div>3</div> <div></div> <div>Use manipulatives and representations to develop understanding</div> <div><ul style="list-style-type: none"><li>Manipulatives and representations can be powerful tools for supporting young children to engage with mathematical ideas</li><li>Ensure that children understand the links between the manipulatives and the mathematical ideas they represent</li><li>Ensure that there is a clear rationale for using a particular manipulative or representation to teach a specific mathematical concept</li><li>Encourage children to represent problems in their own way, for example with drawings and marks</li><li>Use manipulatives and representations to encourage discussion about mathematics</li><li>Encourage children to use their fingers — an important manipulative for children</li></ul></div>	<div>4</div> <div></div> <div>Ensure that teaching builds on what children already know</div> <div><ul style="list-style-type: none"><li>It is important to assess what children do, and do not, know in order to extend learning for all children</li><li>A variety of methods should be used to assess children's mathematical understanding, and educators should check what children know in a variety of contexts</li><li>Carefully listen to children's responses and consider the right questions to ask to reveal understanding</li><li>Information collected should be used to inform next steps for teaching. Developmental progressions can be useful in informing decisions around what a child should learn next</li></ul></div>	<div>5</div> <div></div> <div>Use high quality targeted support to help all children learn mathematics</div> <div><ul style="list-style-type: none"><li>High quality targeted support can provide effective extra support for children</li><li>Small-group support is more likely to be effective when:<ol style="list-style-type: none"><li>children with the greatest needs are supported by the most experienced educators</li><li>professional development, training, support and resources are provided for educators using targeted activities</li><li>sessions are brief and regular</li><li>explicit connections are made between targeted support and everyday activities or teaching</li></ol></li><li>Using an approach or program that is evidence-based and has been independently evaluated is a good starting point</li></ul></div>
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