



## Whole School Numeracy Plan 2013- 2014

### Purpose

To implement a consistent approach across the school to teaching mathematics and to embed numeracy practices across all learning areas. This plan focuses on a sequential approach to skill development from Kindergarten to Year 7.

### Exit Outcomes

To ensure students are confident and creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens.

### Numeracy Beliefs

Numeracy encompasses the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations.

We believe effective teaching of numeracy involves:-

Fluency:- automatic recall of basic facts and use of mathematical terminology

Reflection:- opportunity to reason and articulate the process (How did you do it?)

Explicit teaching:- of concepts, mental calculation and problem solving strategies

Delivery:- through the concrete to abstract progression incorporating games, authentic tasks, investigations and access to digital technology

### Priorities

1. All teachers from Pre-primary to Year 7 plan, teach and assess using the Australian Curriculum Mathematics by end of 2013
2. Increase the performance of all students, and in particular the number of students achieving in the top 20% of the state, in NAPLAN in Years 3, 5 and 7
3. All teachers address the Australian Curriculum cross curriculum priorities by incorporating *sustainability* content and the general capabilities of *literacy, numeracy and critical and creative thinking* into teaching and learning programs by the end of 2013
4. Implement Numeracy Blocks and ability groupings across all cohorts

### Targets (from School Business Plan)

- Arrest the year 3 declining trend in numeracy and ensure lower proficiency band levels are at or equivalent to like schools
- The downward trend indicated in the longitudinal data for Year 5 numeracy is arrested
- Improve year 7 numeracy to within expected performance range
- Ensure 80% of children scoring very limited or limited progress in numeracy NAPLAN make moderate to high progress
- Identified students in bands 6 & 7 in year 5 numeracy will move forward one band in NAPLAN 2012 testing
- Use on-entry data to plan targets for K-P

Outcomes	Curriculum and Instructional Strategies	Data Collection	Professional Learning	Resources
Increase the capacity of ALL staff at CPS to deliver effective numeracy practice.	<ul style="list-style-type: none"> <li>• Maths tasks to be purposeful, relevant and linked to other curriculum areas.</li> <li>• Teachers to identify and target areas of weakness in Numeracy through thorough examination of NAPLAN and SAIS.</li> <li>• Teachers to use Australian Curriculum (PP-Year 7) and the DG Statement with EYLF (K) to inform mathematics teaching and learning programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative DOTT time provided.</li> <li>• Maths resources organised by strand and stored in compactus with bar-coded borrowing system.</li> <li>• Collating/auditing/supplementing maths resources</li> </ul>	<ul style="list-style-type: none"> <li>• Language of mathematics: Paul Swan</li> <li>• Mathematics strategies</li> <li>• Unpacking the Australian Curriculum</li> <li>• Use of CATs in</li> </ul>	<ul style="list-style-type: none"> <li>• Numeracy Walk. Committee to construct a checklist of what you would see in a classroom if the beliefs were embedded.</li> <li>• Share integrated programs.</li> <li>• NAPLAN planners</li> </ul>

	<ul style="list-style-type: none"> <li>Teachers to use First Steps Resources for teaching Numeracy (access via link through the Portal).</li> <li>Teachers to use First Steps to establish class profiles and develop IEPs and GEPs.</li> <li>Teacher accountability: teachers demonstrate numeracy beliefs in classroom practice</li> <li>Collaboration between teachers</li> <li>Use ICT to assist teaching</li> <li>Identified students with limited achievement have documented plans to indicate targets, intervention strategies and ongoing monitoring of performance</li> </ul>	<ul style="list-style-type: none"> <li>Teacher self assessment on beliefs during performance review process</li> <li>IEPs, GEPs and use of the Numeracy Net for identified students</li> <li>On-entry data to indicate “value-add” in numeracy</li> <li>Classroom visits by administration</li> </ul>	<p>moderation activities</p> <ul style="list-style-type: none"> <li>PL for Education Assistants</li> <li></li> </ul>	
<p>Increase each student’s capacity to understand mathematical concepts, develop fluency in skills, problem solving and reasoning (Mathematics proficiencies)</p>	<p>Teachers will:</p> <ul style="list-style-type: none"> <li>ensure rich print environment in their classrooms</li> <li>have concrete materials available to all classes K – 7</li> <li>engage in meaningful real world maths based activities with Sustainability Coordinator.</li> </ul> <p>Students will:</p> <ul style="list-style-type: none"> <li>Use mathematics reflection journal</li> <li>Complete Mathletics for homework activities</li> <li>Be active and participate in hands-on, concrete activities</li> </ul>	<ul style="list-style-type: none"> <li>Pre-primary teachers to use on-line entry testing as a basis for target setting.</li> <li>PAT online mathematics assessment September</li> <li></li> </ul>	<p>Coaching approach to mathematics instructional strategies</p>	<ul style="list-style-type: none"> <li>Use of portal Resources</li> <li></li> </ul>
<p>Enhance parents’ awareness of the increasingly sophisticated understanding of mathematical concepts and fluency of processes required to pose and solve problems and to reason</p>	<ul style="list-style-type: none"> <li>Parent workshops on numeracy, counting K-3.</li> <li>Home activities</li> <li>Newsletter to contain tips for parents about numeracy at home (Numeracy team to ensure tips are ready for each newsletter)</li> </ul>	<p>Parent Survey</p>		<p>Newsletters Homework policy Web site links to resources</p>