# **CONTINUITY OF LEARNING PLAN: NUMERACY**



## **Numeracy Agreement:**

At Clarendon Primary School our vision is for students to receive high quality teaching in mathematics to support the development of rich mathematical knowledge and understanding, a positive mindset towards maths and numeracy; and the ability to apply mathematical skills confidently in their daily lives.

#### The Australian Curriculum (AC) Mathematics aims to ensure that students:

- are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason Number and Algebra, Measurement and Geometry, and Statistics and Probability.
- Recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study. www.australiancurriculum.edu.au

# Effective Teaching, Quality Curriculum & Pedagogy

At Clarendon PS we believe it is essential to present a 'whole school' approach to the Teaching and improvement of mathematics guided and informed by the analysis of current data.

#### **Teachers will:**

- Ensure our school practices are consistent with the AC outcomes and Achievement Standards and DfE requirements R-6.
- Allocate a minimum of 300 minutes per week of mathematics.
- Articulate the expected learning intentions with students and parents (e.g. term overviews, learning goals, learning intentions shared with students/parents).
- Ensure numeracy skills and knowledge are integrated across all subject areas.
- Encourage curiosity, engagement, risk taking and self-reflection in numeracy.
- Foster a positive approach to powerful learning and growth mindsets in numeracy.
- Explicitly teach problem solving strategies using gradual release model.
- Incorporate the Big Ideas in Number into teaching programs.

## **Consistent core strategies & concepts**

Big Ideas in Number – Di Siemon	R	1	2	3	4	5	6
<b>Trusting the Count</b> – developing flexible mental objects for the numbers 0 - 10							
<b>Place Value</b> – the importance of moving beyond counting by ones, the structure of the base 10 number system							
Additive and Multiplicative Thinking – developing efficient mental written computation strategies							
Partitioning – building common fractions and decimal knowledge and confidence							
<b>Proportional Reasoning</b> – needed to solve problems involving fractions, decimals, percentage, ratio, rate and proportion							
Generalisation – fundamental to engage with broader curricula expectations							

# **Agreed High Impact Teaching Practices**

(These are all modelled in the DfE units of work)

**TARGETED DIFFERENTIATED TEACHING**: Teachers will build on what each individual learner knows and use this information to identfy and scaffold future learning needs. They will use data to inform stretch and enrichment priorities and will track and monitor progress and efficacy using specific measures.

**LOGICAL AND INTENTIONAL SEQUENCING OF THE LEARNING:** Teachers will build connections to learning using well-sequenced, manageable and intentional steps. They will vary the steps according to student needs, support students to develop their own learning goals and support the gradual expansion of skills and knowledge in each child.

**CLEAR LEARNING INTENTIONS:** Staff will develop and communicate clear learning intentions for sequences of learning. Students will know what is expected. Goals are challenging and specific. Success criteria are explicit and transparent and learners understand what success

looks like. Students experience clear transitions between lessons and consistent, predictable routines. Caregivers are made aware of learning goals and feedback.

**EXPLICIT TEACHING:** Teaching practice will show students what they need to do to be successful. Learning will be designed with clear learning intentions and instruction with a focus on revealing misconceptions, promoting cognitive strategies and allowing review and practice time. Learning is scaffolded to support gradual release.

**MULTIPLE APPROACHES:** Teachers will use a variety of approaches to instruction and use effective questioning. They will program multiple exposures and representations and include collaborative work.

**ONGOING FEEDBACK:** Teachers will provide timely advice and actionable feedback for all students using differentiated methods. Feedback and assessment are both formative and summative and may include peer, small group and individual feedback. Feedback will be shared regularly with caregivers.

## **Agreed Evidence Based Best Practices for Numeracy Improvement**

- 1. Extending students in mathematics through collaborative guided inquiry.
- 2. Extending student number sense to accelerate learning.
- 3. Building visualisation skills to deepen mathematics learning.
- 4. Generalising and building abstraction in mathematics.

These strategies incorporate aspects of collaborative learning, feedback, peer tutoring, metacognition, reading comprehension strategies, self regulation and language interventions, as described in The Department Literacy & Numeracy First: Primary Years focus guide.

## **Monitoring Student Progress**

Student progress is monitored by collecting and analysing a range of data through different processes which may include:

- Evidence collection: Formative and summative assessment, rubrics, anecdotal data, observations, photographs, checklists, pre and post testing and specific diagnostic testing.
- Evidence is analysed and used to inform teaching and learning goals for individuals, groups of students, cohorts and whole school priorities.
- Reporting to parents as required, including interviews (Term 1-3) and written reports (end of Term 2 and Term 4).
- A range of self or peer assessment strategies and processes, combined with student conferencing.

Data will be used to inform classroom practice Site Improvement Priorities and inform the Learner Enrichment Team. Data collected is informative, useful and relevant. Students can engage with their own data when and where appropriate.

Mandatory Assessments	R	1	2	3	4	5	6
TOO SMART –SUBITISING DATA							
I CAN DO MATHS							
NAPLAN - MATHS							
PAT MATHS							
BIIN – MISUNDERSTANDINGS TESTS: as required							