

Freeling P - 6 Numeracy Agreement



At Freeling Primary School, we believe that all students should be numerate. Our vision is for students to receive high quality teaching in mathematics to support the development of rich mathematical knowledge and understanding, a positive growth mindset towards maths and numeracy; and the ability to apply mathematical skills confidently in their daily lives.

Quality Curriculum

The Australian Curriculum: 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.

Our Preschool practices are consistent with the Early Years Learning Framework and Numeracy Indicators.

Our school practices are consistent with the Australian Curriculum outcomes and achievement standards. http://www.australiancurriculum.edu.au

The Numeracy General Capability and Cross Curricular Priorities are incorporated across all learning areas.

The National Numeracy Progressions, describe the progression of skill development required for students to gain mastery in each concept.

Quality Teaching

Effective Teaching Pedagogy / High Impact Teaching Strategies:

At Freeling 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. We are committed to building the capacity of staff, so they are able to design high quality learning experiences that engage and challenge all students. We will encourage curiosity, engagement, risk taking and self-reflection in numeracy.

Teachers will:

• Ensure our school practices are consistent with the EYLF / Australian Curriculum outcomes and Achievement Standards and DfE Scope & Sequence and requirements P-6

• Develop a program of logical and intentional lesson sequences that incorporate the Big Ideas in Number, Natural Maths strategies and the 4 proficiencies: Fluency, Understanding, Reasoning & Problem Solving.

• Articulate the **learning intentions and success criteria** (derived from the EYLF / AC) with students and parents (e.g. Term overviews, learning goals, learning intentions shared with students/parents)

• Explicitly teach mathematical **vocabulary**, strategies of **problem solving strategies** (STAR) and mathematical concepts in a 3 part lesson structure of: Mental Routines, Problematised Situations and Reflection.

• Provide targeted differentiated teaching; supporting students in achieving their learning goals.

• Provide timely advice and actionable feedback for all students including next steps in learning.

• Allocate a minimum of 300 minutes per week of mathematics

Consistent Core Strategies and Concepts									
Mental Computation – Ann Baker strategies	Р	R	1	2	3	4			
Subitise, Count All, Count On/Back and Doubles.									
Number lines 0-10									
Turnarounds, Rainbow Facts, halves & Friendly									
Numbers									
Bridge through to 10 and extend number facts; Count									
on 10, 20, 30 Doubles and Near Doubles, Rainbow Facts									
to 100 & Friendly No's									
Landmark Numbers, Tallies, Rainbow Facts linked to									
Number Splitting, halving.									
Rounding and Round & About									

Big Ideas in Number – Di Siemon	Р	R	1	2	3	4	5	6
Trusting the Count – developing flexible								
mental objects for the numbers 0 - 10								
Place Value – 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								
Reasoning – needed to solve problems								
involving fractions, decimals, percentage,								
ratio, rate and proportion								
Generalisation – fundamental to engage with								
broader curricula expectation								

Monitoring Student Progress

Student progress in numeracy is monitored by the regular collection and analysis of data. Formative assessment practices inform teaching and learning pedagogy and programs. A focus on questioning, providing feedback and student reflection is required. Scorelink is used to collate data. A variety of diagnostic, formative and summative of assessments are used.

Assessment	PS	Rec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Notes
NAPLAN									Completed in March from 2023 (specific dates given year by year)
PAT-Maths									Completed in October (online)
BliN Screening									Completed in the first 5 weeks of Term 1 and throughout the year as needed for students not "green" (T drive). Reception students to be screened when "ready"
Preschool									Preschool Numeracy Indicators
Moderation									Notes
Team Moderation									Moderation of Numeracy tasks, within teaching teams throughout the year.
Reporting									Written reports in Term 2 and Term 4 to reflect the wording of the relevant AC Achievement Standard or EYLF

Intervention

Students who are at risk of not meeting Standard of Educational Achievement (SEA) have access to additional support or programs.

Staff use a range of data, including Preschool Numeracy Indicators, BliN screening, PAT Maths and NAPLAN, to identify needs of students. Staff then develop and monitor appropriate intervention. This may include:

- Support within the class
- Small group support using programs such as Quick Smart, Toosmart, Big Ideas in Number/M4LI and Numeracy First Groups
- 1:1 or small group support with SSO's and planned by teachers.
- One Plans with individually set goals.

Resources

FPS Numeracy Blog, Natural Maths, Big Ideas In Number, Maths for Learning Inclusion, DfE Units, Top 10, NZ Maths, NRich, Nelson Maths, ACER (Teacher Resource Centre), Maths 300, Back to Front Maths, Rich Learning Tasks, Rainforest Maths, Task Centre Tasks, Western region Tasks, Digital Mathematics Tools, First Steps, Mastery Maths

Professional Development

Professional Development in Numeracy will reflect our SIP priorities and DfE priorities. It will include access to current pedagogies, induction and support for new staff, shared professional learning experience across the site.