## Numeracy

## Numeracy Goal

- To provide targeted teaching to meet needs and improve Numeracy levels/skills
- To building a community of learners


## Numeracy Block

- Rec-Yr.2: Mon-Thurs 11:30-12:30
- Yr. 3/4, 4/5: Mon - Thurs 12:30-1:30

| Roles | Jane (6/7) |
| :--- | :--- |
| Classroom Teachers |  |
| Fran (R/1) | Co-educators |
| Malama (1/2) | Maria |
| Natalie (3/4) | Jodie |
| Cristian (4/5) | Specialists |
| Matt $(5 / 6)$ | Louise (Inclusive Ed) |

## Structure

- Numeracy Block is at least an hour uninterrupted

Students learning needs are targeted through specific grouping based on data- flexibility to work with students in small groups and 1:1

- Groupings are not confined to age or year level
- Student grouping is discussed in Learning Team (LT) meetings
- Classroom teachers, specialist teachers and co educators (ESOs) work within Numeracy Groups


## Pedagogy

- Teaching mathematical strategies explicitly

Scaffolding
Real world connections
Key ideas: conceptual understanding, fluency, problem solving and reasoning

- Language of Mathematics- correct terminology
- Explicitly teach worded problems
- ICt integration


## Content Knowledge

## Content strands and sub-strands in the Australian Curriculum: Mathematics (F-10)

| Number and algebra | Measurement and geometry | Statistics and probability |
| :--- | :--- | :--- |
| Number and place value (F-8) | Using units of measurement (F-10) | Chance (1-10) |
| Fractions and decimals (1-6) | Shape (F-7) | Data representation and interpretation (F-10) |
| Real numbers (7-10) | Geometric reasoning (3-10) | N/A |
| Money and financial mathematics (1-10) | Location and transformation (F-7) | N/A |
| Patterns and algebra (F-10) | Pythagoras and trigonometry (9-10) | N/A |
| Linear and non-linear relationships (7-10) | N/A | N/A |

www.australiancurriculum.edu.au/f-10-curriculum/mathematics/structure/

## Mathematical Proficiencies



Adding It Up: Helping Children Learn Mathematics
Jeremy Kilpatrick, Jane Swafford, Bradford Findell, Editors; Mathematics Learning Study Committee, National Research Council

## Targeted Teaching



Goss, P. Hunter, J. Romanes, D. Parsonage, H. (2015) Targeted teaching: How better use of data can improve student learning, Grattan Institute.

## Assessment

## Regular, ongoing assessment (schedule)

## Rec-Yr. 2 Numeracy Rubrics

## Yr.3-7 PAT-M

Yr. 3, 5 \& 7 NAPLAN

NG teachers assess students in their group and shares results with classroom teachers

Upload data to database once a term (or as assessments completed)

|  | Reception | Yr. 1 | Yr. 2 | Yr. 3 | Yr. 4 | Yr. 5 | Yr. 6 | Yr. 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Term } \\ & 1 \end{aligned}$ | PAST <br> Literacy Skills Checklist <br> Numeracy Rubrics | PAST (as req.) <br> Running Records <br> Numeracy Rubrics <br> BURT <br> Westwood | PAST (as req.) <br> Running Records <br> BURT <br> Westwood | Running Records PAT-R <br> PAT-M <br> BURT <br> Westwood | Running Records PAT-R <br> PAT-M <br> BURT <br> Westwood | BURT <br> Westwood <br> PAT-R <br> PAT-M | BURT <br> Westwood <br> PAT-R <br> PAT-M | BURT <br> Westwood <br> PAT-R <br> PAT-M |
| $\begin{aligned} & \text { Term } \\ & 2 \end{aligned}$ | PAST <br> Running Records <br> Numeracy Rubrics <br> EAL Levelling (oral) | EYA <br> PAST <br> Running Records <br> Numeracy Rubrics <br> EAL Levelling (written) | PAST <br> Running Records <br> EAL Levelling (written) | Running Records <br> NAPLAN (May) <br> EAL Levelling (written) | Running Records <br> EAL Levelling <br> (written) | Running Records NAPLAN (May) EAL Levelling (written) | Running <br> Records <br> EAL Levelling (written) | Running Records NAPLAN (May) EAL Levelling (written) |
| $\begin{aligned} & \text { Term } \\ & 3 \end{aligned}$ | PAST <br> Running Records <br> Numeracy Rubrics | PAST <br> Running Records <br> Numeracy Rubrics <br> BURT <br> Westwood | PAST <br> Running Records <br> BURT <br> Westwood | Running Records <br> BURT <br> Westwood <br> PAT-R <br> PAT-M | Running Records <br> BURT <br> Westwood <br> PAT-R <br> PAT-M | Running Records <br> BURT <br> Westwood <br> PAT-R <br> PAT-M | Running Records <br> BURT <br> Westwood <br> PAT-R <br> PAT-M | Running Records <br> BURT <br> Westwood <br> PAT-R <br> PAT-M |
| Term $4$ | PAST <br> Running Records <br> Numeracy Rubrics | PAST <br> Running Records <br> Numeracy Rubrics | PAST <br> Running Records <br> Numeracy Rubrics | Running Records | Running Records | Running Records | Running Records | Running Records |

## Collaboration

- Teachers collaborate through Learning Teams- teachers share their lesson focus, activities, assessments
- LT meetings- 3 per term (minuted)


## Learning Environment

Learning environment encourages collaboration, flexibility and creativity- e.g. round tables, sitting/ standing, etc.

- Students have opportunities to work together, discuss, work with different people and share work
- Planning for hands-on, interactive activities

