BALMACEWEN INTERMEDIATE

Maths at Balmacewen Intermediate

At Balmacewen Intermediate our vision of "Learning is forever" is evident in the practice of our teachers and in our students' learning. You will find our PERK values of Perseverance, Excellence, Respect and Kindness woven through our integrated maths curriculum. At Balmacewen Intermediate, we believe every student can achieve and find success in mathematics.

Our aim is to produce confident students who have a well-developed number sense who are able to solve mathematical problems required of them in their everyday lives. Research indicates that mathematics, or the ability to be a good mathematician is not genetic, but rather a way or belief and attitude.

Mathematics in the classroom promotes learner- centered experiences which strive for engagement, relevance and progress. Learning experiences are grounded in current teaching and learning practices and are differentiated to suit the strengths and learning preferences of the students in each class. Maths is planned collaboratively within year group teams in consultation with dean and maths leaders. Homeroom teachers who know students best teach the maths programme with the exception of the maths extension programme .

Extension: Balmacewen Intermediate provides a maths extension programme in both year 7 and 8. This is taught by a maths specialist teacher. Students who wish to be considered for this programme are able to sit the entry selection test each term to be considered for the upcoming term.

Guidelines for 10 day maths cycle:
Our students work in small, collaborative, problem-solving groups to unpack and solve a problem. Our teachers plan workshops in the days leading up to each collaborative session, to ensure that each child is equipped with the necessary mathematical tools.
An example:

- **Day 1:** Launch the problem - create interest and curiosity.
  Whole class/ group workshop - focussed on any of the following:
  mathematical skills, knowledge or language depending on student need.

- **Day 2 and 3**: Workshop focussed - practice the mathematical skill explored on Monday or 2 x further smaller workshops focussed on student need - preparation for the problem the following day.

- **Day 4 and 5 :** The problem spans over 2 / 3 days and students work collaboratively using Thinkboards to show their thinking and provide mathematical proof. Group roles are used to ensure equitable participation.

- **Day 6 and 7** - Filling the gaps

- **Day 8** - Knowledge days with the possibility of making one of those days a catch up.

Structure and advice for groupings for problem solving:

- On each problem solving day, the teacher works with 3-4 mixed ability trios (9-12 students).
- Group roles (brain, pen and the voice) will be utilised to support the mixed ability trios and ensure equitable participation.
- Some students may double dip over 2 days' problem solving in order to support their learning and the learning of the others.

Independent and Follow Up

- Tasks to reinforce new learning might include e -ako, a worksheet, a puzzle, problems, Mathletics, Maths Buddy, Education Perfect.

Knowledge Day

- Based on findings of basic facts, quizzes and IKAN students are provided workshops and learning experiences which are differentiated and focused on their development of Mathematical knowledge.

Timetable
Assessment : Assessment experiences are continual and should inform teaching. All students sit the Maths PAT. Other assessments include IKAN, teacher made tests, exit tickets, basic facts tests, book work and observations (see Thinkboards).