

scitech

# Lighthouse Maths

Information Pack

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# Program Summary

**Lighthouse Maths is a professional learning program that explores transformational approaches in maths education to equip primary educators with powerful strategies and techniques to elevate their maths teaching practice through mastery of the proficiencies.**

The Lighthouse Maths program develops the capability of primary teachers as leaders in inquiry maths approaches, with a focus on the use of problem solving and reasoning techniques to develop a deeper conceptual understanding of maths through challenging tasks.

Through workshops, coaching and networking sessions with peers the program aims to empower primary educators with a tool kit to enhance their teaching practice and improve student engagement and achievement in maths.

Lighthouse Maths is underpinned by the foundations of our high impact Alcoa Champions of Maths program, a program with successful measurable results developed using the latest research on effective maths teaching techniques, drawing information from leading maths education experts worldwide.

Through the support of Chevron the Lighthouse Maths program is provided for free over the course of a year to select schools, and will be available for delivery to primary schools in the Perth metro region during 2022, 2023 and 2024.



# Program Structure

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- 01** Participation in Lighthouse Maths will be available to two dedicated and enthusiastic teachers at your school. Teachers should be teaching Year 2 or above.
  - 02** The teachers will complete six (6) online learning modules in the Powerful Problem-Solving (PPS) approach.
  - 03** Following the completion of each module they will participate in a Coaching Round where they will be supported to implement the approach by our Lighthouse Coaches who have years of experience in implementing Powerful Problem Solving.
  - 04** The teachers will attend three major events during the year that bring together all the participants in the program to share their learning journey.
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# Powerful Problem Solving

- 01** This approach combines methods developed by researchers in Australia, UK, Canada and the US into a consistent approach to lesson planning and delivery.
- 02** Lessons are driven by productive struggle, collaboration and rich discussion.
- 03** Students will learn to think deeply, solve flexibly, defend solutions, improve efficiency and reason soundly.
- 04** This approach can be integrated into any existing learning program.





# Coaching Round

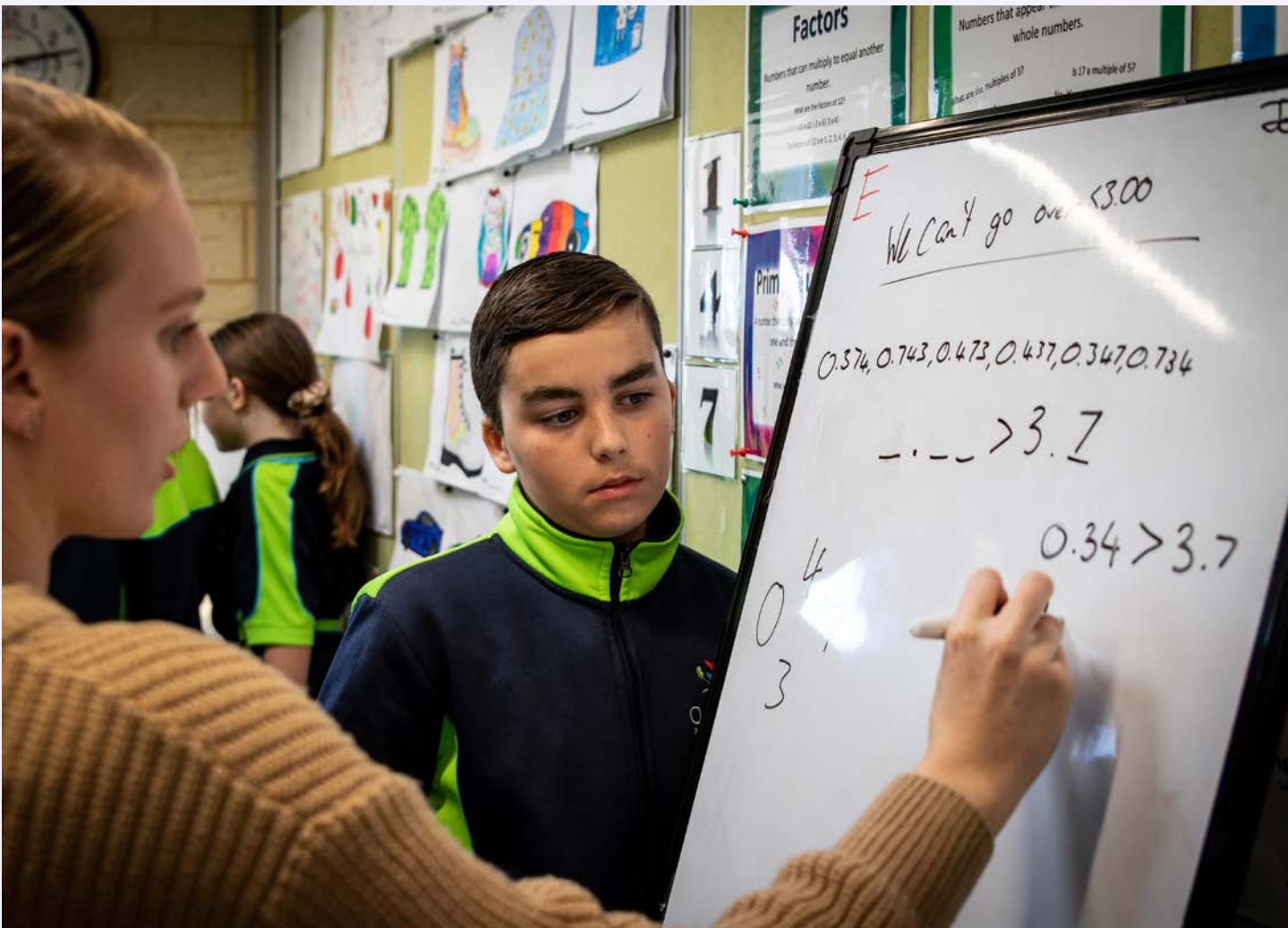
Each coaching round consists of:

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- 01** A one-on-one half-hour live online consult for each teacher where they discuss the lesson plan with the Lighthouse Coach and prepare for the lesson.
  - 02** A supported lesson delivery session (with each teacher delivering the lesson, supported by the coach, and observed by the other teacher).
  - 03** A debrief session where the coach and the two (2) teachers will discuss both lessons immediately after they conclude.
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# Resources provided

- 01** Relief. In order to conduct the lesson delivery and debrief sessions, both teachers will require half-day relief in each coaching round. In order to attend the three (3) major events, both teachers will require three (3) full days of relief. The school will organize this and invoice Scitech who will fully reimburse these costs.
- 02** Books. Each school will be provided with a selection of books to support the teachers learning and provide lesson ideas.
- 03** Whiteboards. Each school will be provided a class set of eight (8) mobile whiteboards that are used in facilitating collaborative problem-solving experiences for students.





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