Small Group Discussion Instructions

Interrogate the core structural idea corresponding to the **Breakout Room Number**.

- a) Individually consider the a). Advantages and b). Possible implications / challenges of these ideas and record in the Padlet (link below core structural idea) (5 minutes)
- b) Share your thoughts within the group (person whose name starts closest to and not before M to record and be prepared to present back to broader group upon return (10 minutes so consider how long each will need to share based on numbers)
- c) Summarise what presenter will say upon return (5 minutes)
- d) Return to main room (this will occur automatically and you will receive a 60 second warning)

Core Structural Ideas:

1. Alignment of content to the Australian Curriculum: Senior Secondary Framework

https://padlet.com/blendedlearning1/7zdbz7ddn21s9zis

- Level 2 (Units 1 and 2) and Level 3 (Units 3 and 4)
 - o All Graphs, Networks and Decision Mathematics in Level 3
 - Applications of right-angled trigonometry in Level 2, and World Geometry and applications of non-right angled trigonometry (Heron's rule, Sine and Cosine rules) moved from Level 3 to Essential Mathematics Level 3.
 - Both EM3 and GM2 will cover right-angled trigonometry including solving problems involving angles of elevation and depression and bearings, however, EM3 will be a more applied context.
- Greater alignment to other jurisdictions (including supportive resources e.g. commercially produced textbooks / resources and those that are developed within jurisdictional 'communities of practice')
- 2. 150 hour offerings covering nominally 120 hours content, provides opportunity to prescribe 30 hours of teaching time to extended applications of knowledge (represented through work requirements)

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- Extended problem solving, mathematical modelling and investigation tasks
- Greater alignment to other jurisdictions (e.g. Victoria study design available for consultation)

3. Greater emphasis on students demonstrating conceptual understanding, problem solving, reasoning and reflective thinking

https://padlet.com/blendedlearning1/7kyizyky4yj5ppa9

- Captured through extended application tasks
- Reflected in the learning outcomes
- Progression between Level 2 and 3 (and relationship with Level Preliminary, and 1-4 through other courses

4. Integration of learning outcomes within criteria

https://padlet.com/blendedlearning1/ps20gdjpft6h3uah

- Communication of ideas, use conventions and interpret concepts captured through conceptual understanding
- Mathematical representation, use of conventions captured through procedural fluency
- Reflective thinking, strategic thinking, mathematical representations and reasoning/justification captured through problem solving and reasoning
- Progression of complexity between Level 2 and 3 (and relationship with Level Preliminary, and 1-4 through other courses

5. Greater integration of content between topics (for example in a 6 criteria course)

https://padlet.com/blendedlearning1/4rdmsax9orpvmqhl

- Possibly 2 criteria per module (1 on conceptual understanding of key knowledge and 1 on procedural fluency of key skills) that would cover 3 topics
- Possibly 2 criteria for 'problem solving, reasoning and investigation module (maybe 1. select and apply mathematical processes / problem-solving techniques and 2. analyse results, justify processes and evaluate.....)
- Reflected in the External Assessment Specifications for Level 3 (if 3 criteria, 1 per content module + 1 for mathematical investigation either student presented (folio) or stimulus made available at designated point in time)

6. Demonstrate computational thinking, use of technology

https://padlet.com/blendedlearning1/816u1if37v7lgms0

 Possibly referenced in standards under all relevant criteria / is this warranting of its own criteria e.g. apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in extended applications