

Tens family
Year 3/4
Lesson 7

Strategy Journals for $\times 10$, $\times 9$, $\times 5$, \times close to 100 and close to round numbers flipbooks

Learning intention: Record your understanding of each strategy in the same multiplicative family.

Maths vocabulary: record, journal, strategy, multiplicative family

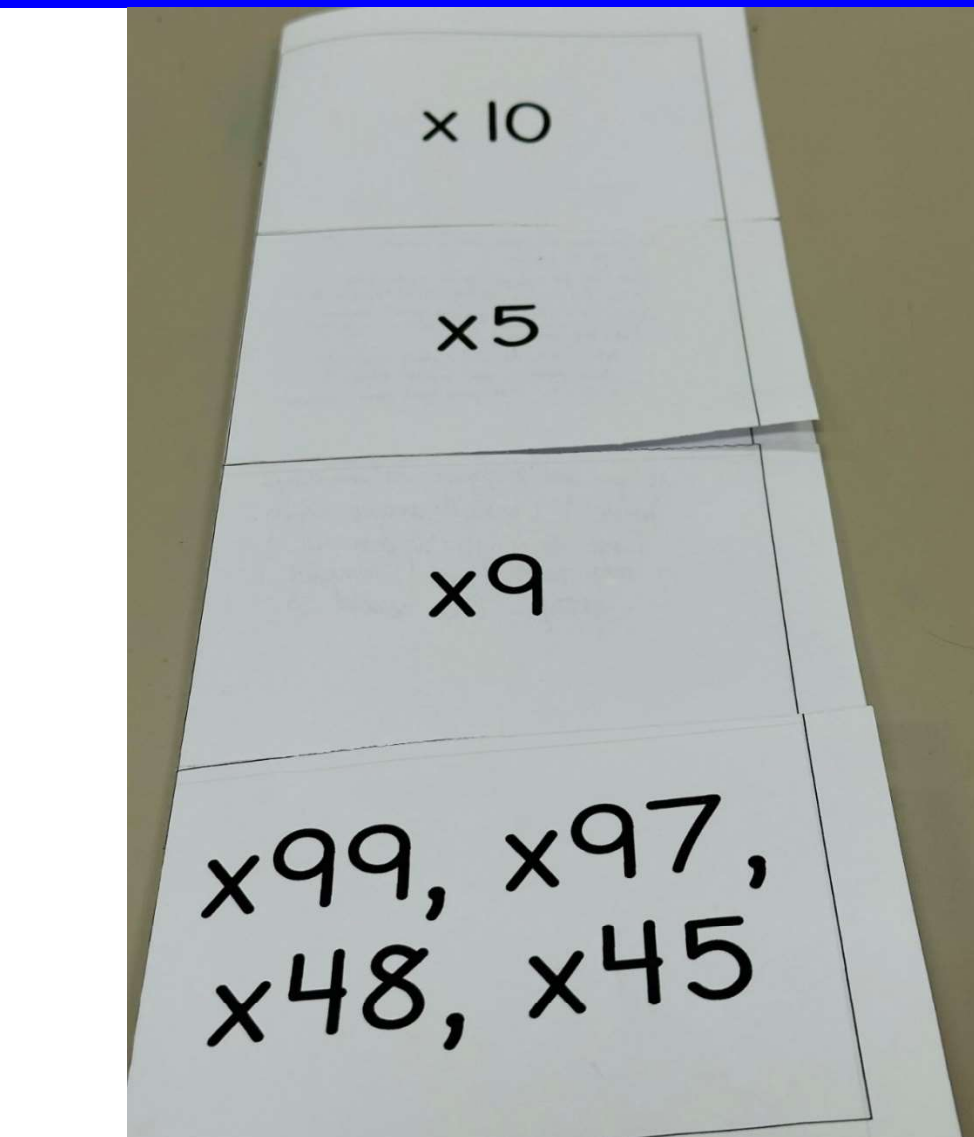
YouTube hook – TEDx Talk on the power of writing and journaling: <https://www.youtube.com/watch?v=r91TXGhBfc0>

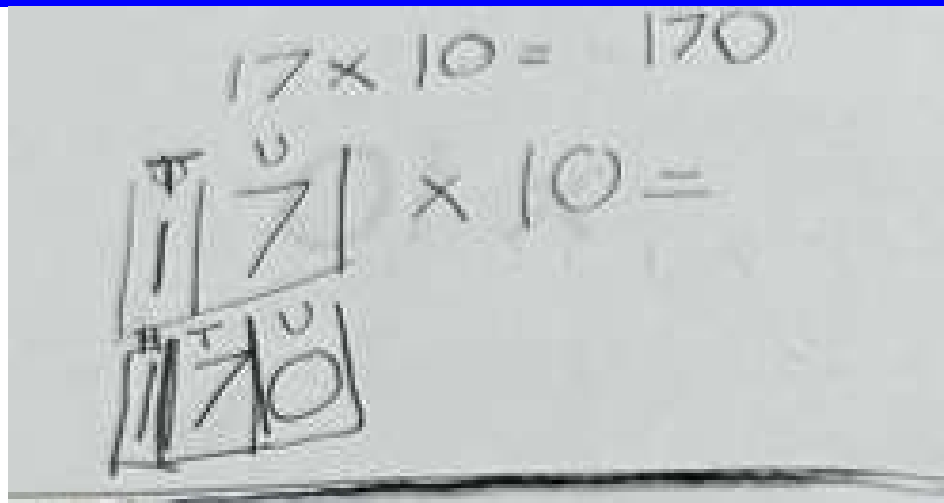
Lesson summary: Students use their favourite materials from the unit, and also look back in their maths books to reflect on and record their strategies and understanding of each strategy for the future.

Materials:

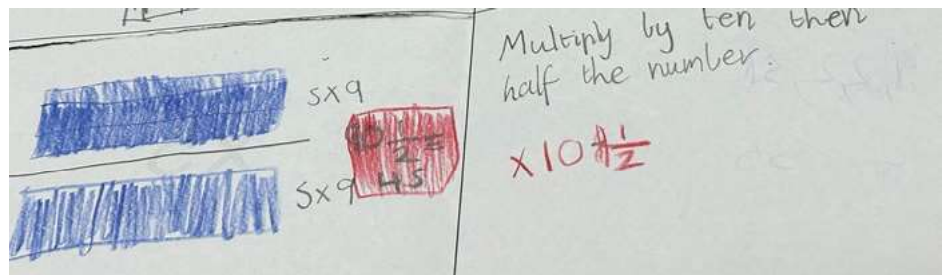
- [Multiplication strategy journal flipbooks](#) – **pages 3 and 4.**

Best set-up: Whole-class model one example panel, but emphasise students can make their notes in the way that makes sense to them, because they are for their future forgetful selves (*Liljedahl, 2020*).

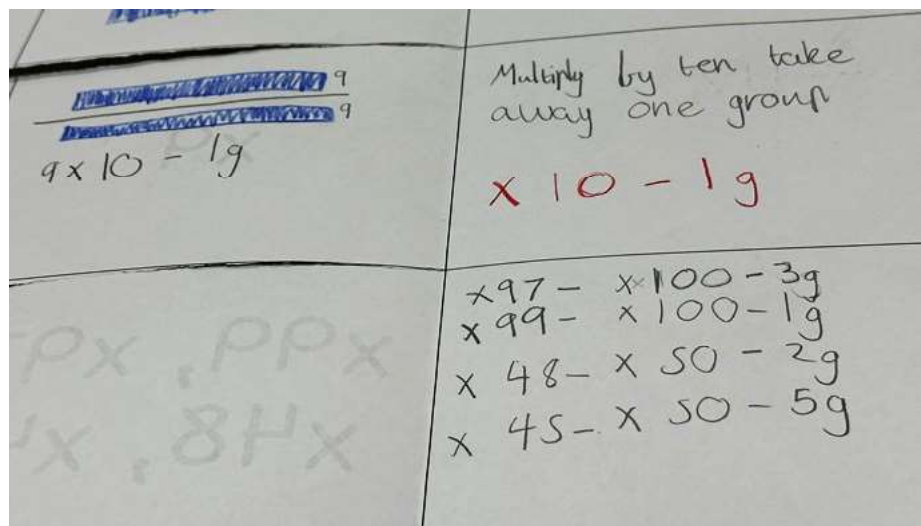




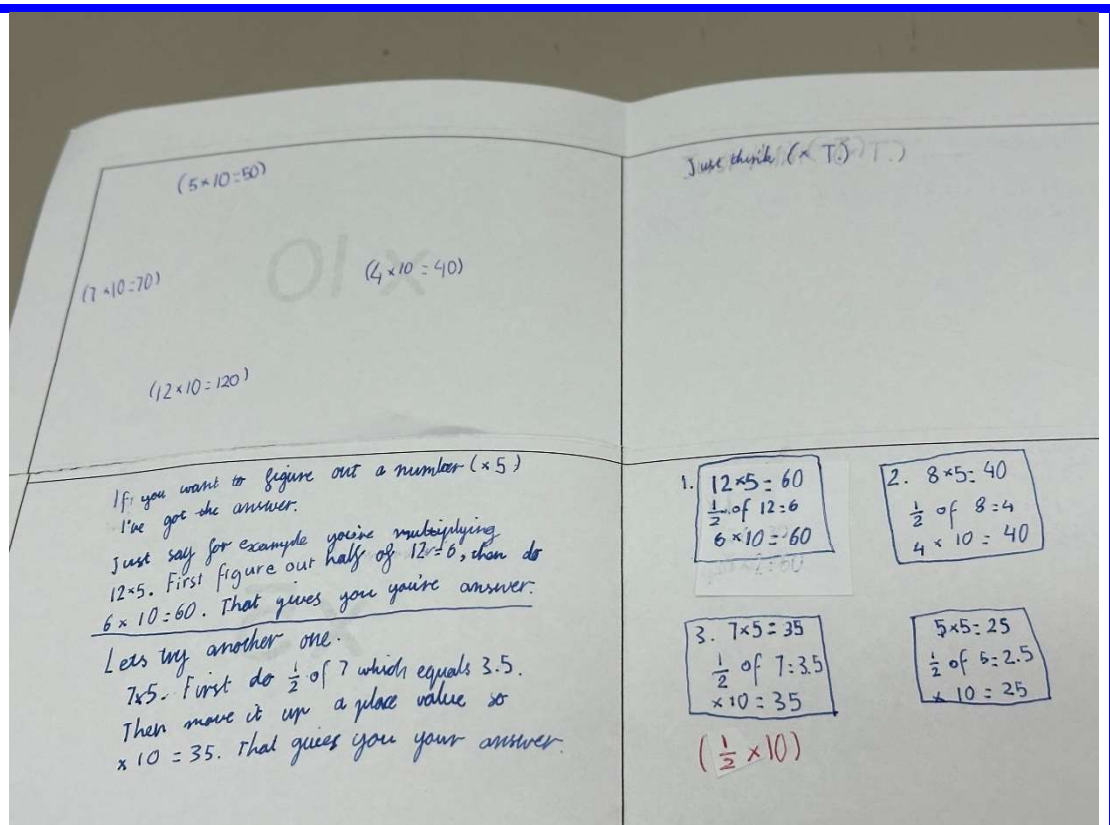
x10 panel



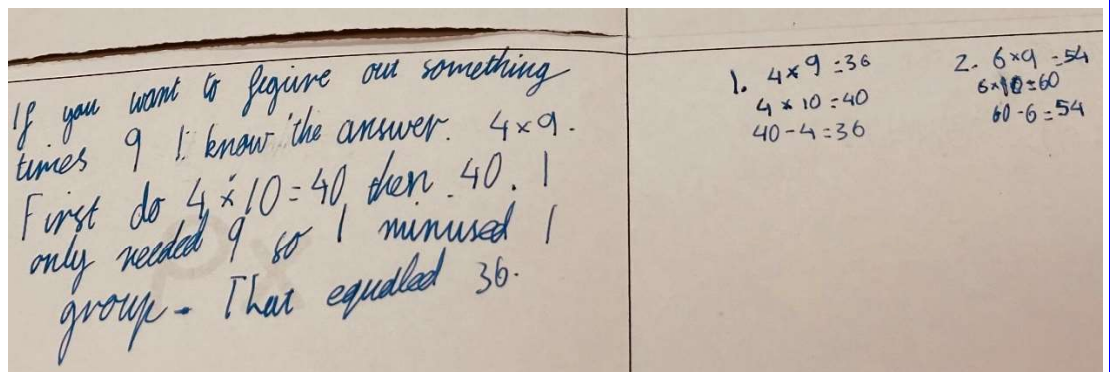
x5 panel



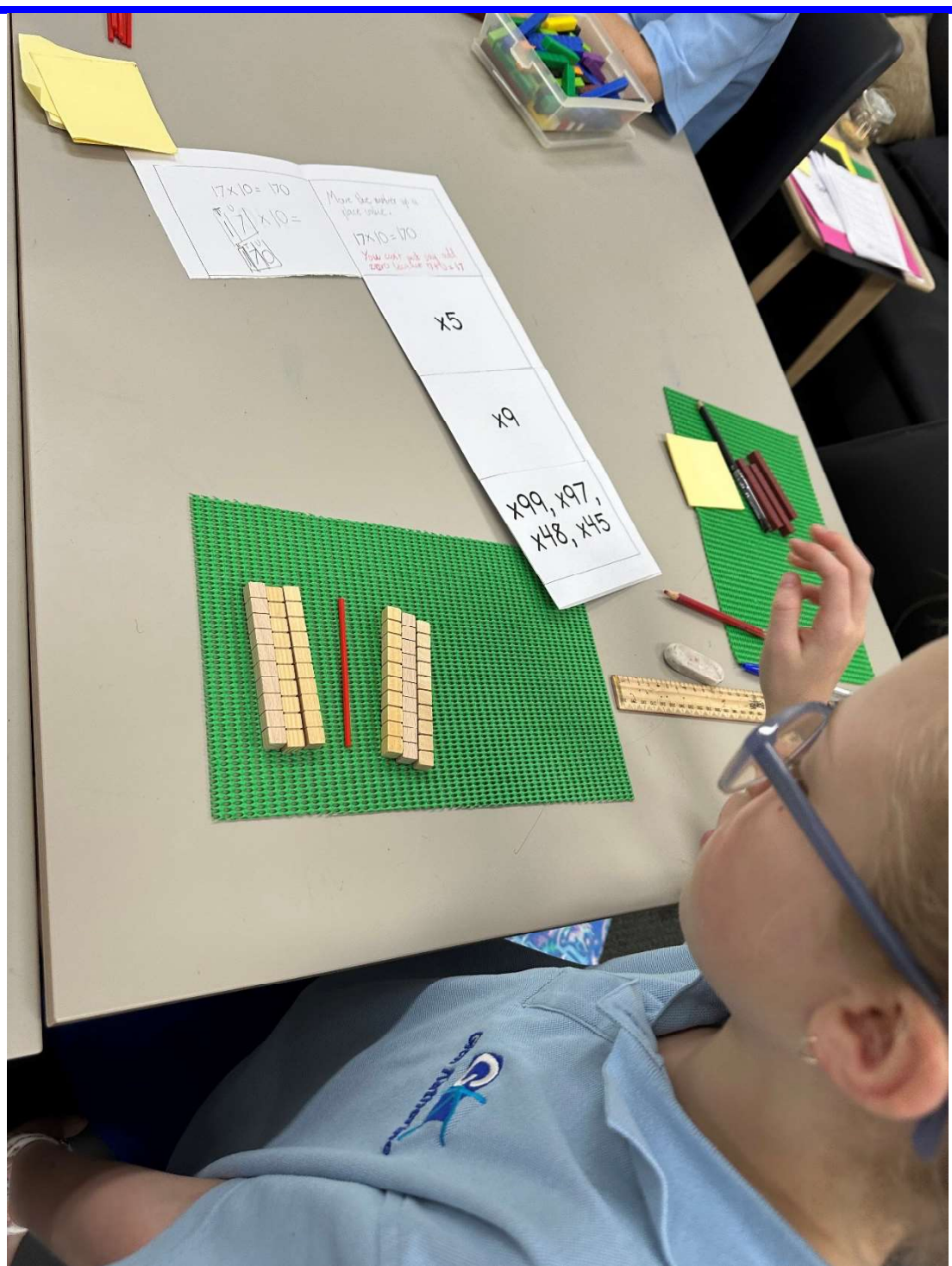
x9 and final challenge panel (x97, x99, x48, x45)



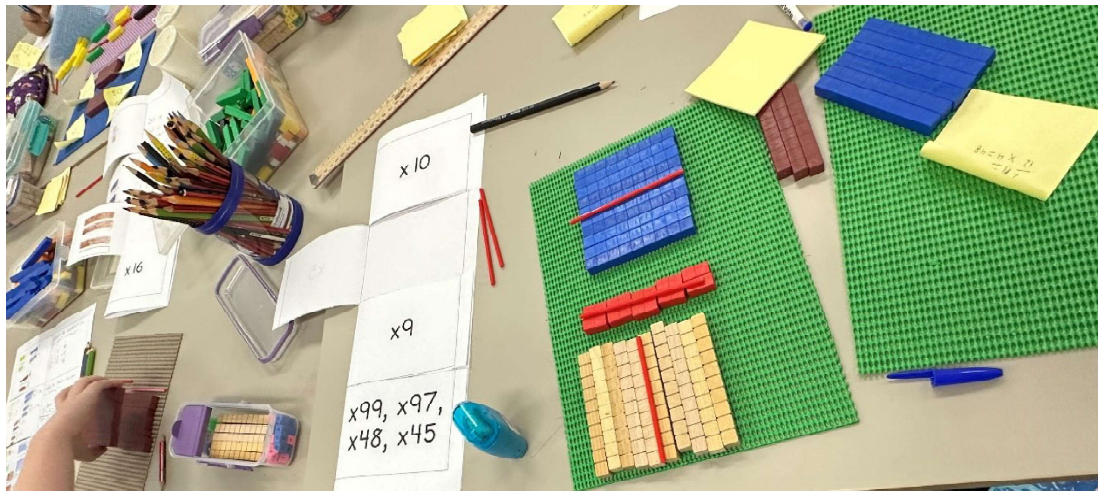
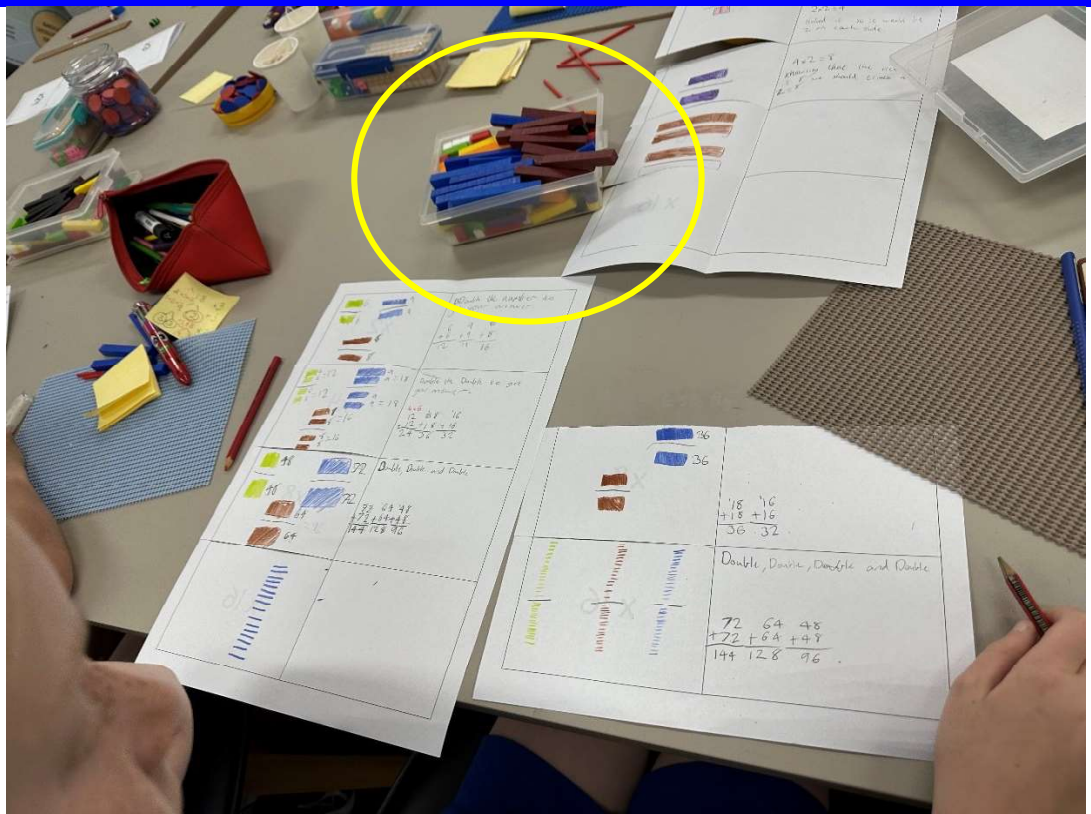
x10 and x5 panels



x9 panel



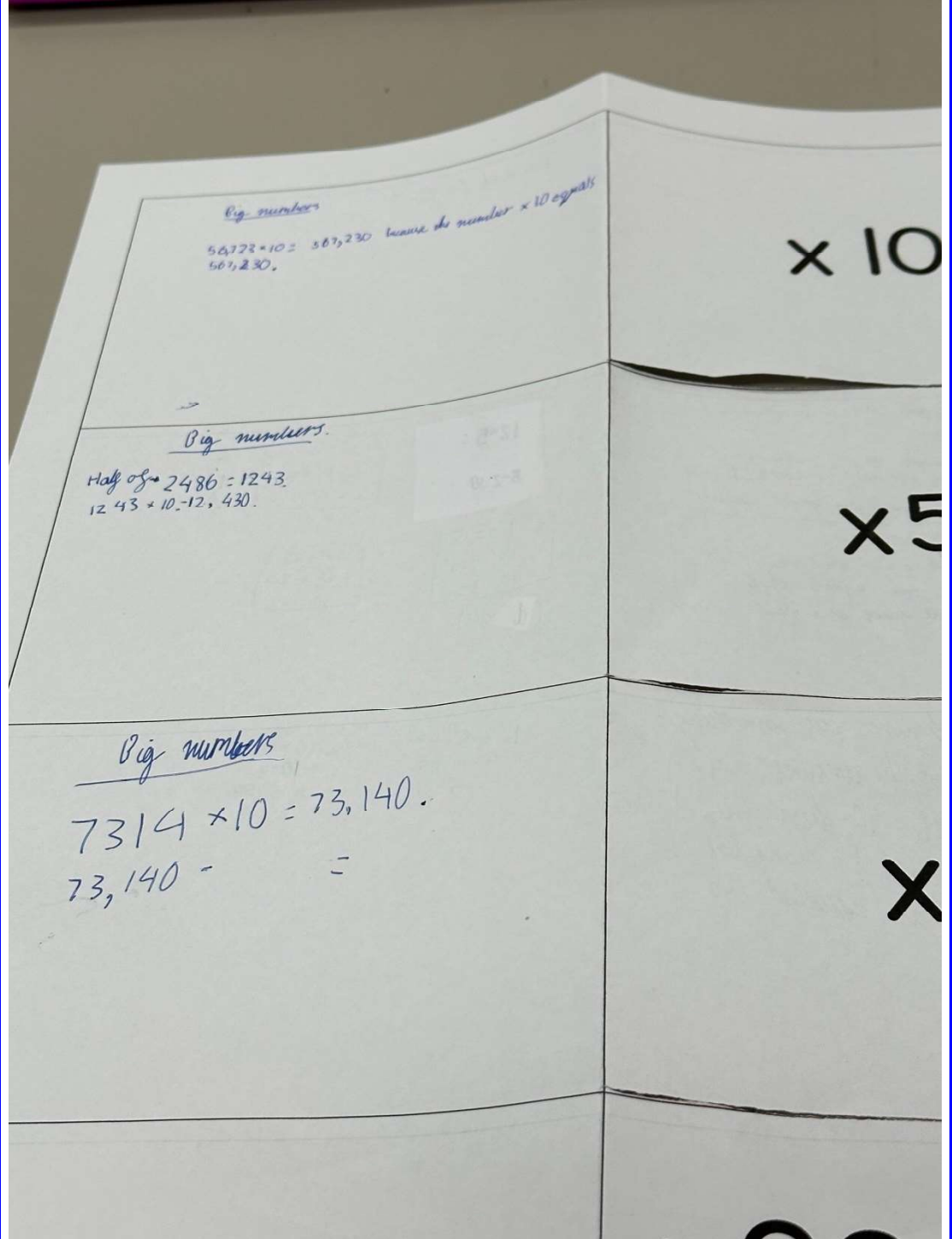
Support 1: Continue to use the Cuisenaire rods and tens blocks to create the strategies, as in many previous lessons within this unit.



Working on the x5 panel by having arrays of ten

Support 2: Gallery walk other students' examples for more support on how to record their own preferred strategy.

Extension 1: Apply the strategies to larger numbers in the examples panels:



For example, what would a strategy be for 996×492 (no vertical algorithms allowed). You could multiply 492×1000 , then take away 4 groups of 492. Brainstorm challenging examples of how to apply the compensation rule of the nines strategy to larger and more complex examples, as well as decimal examples.