

Creating Mathematical Mindsets – Notes

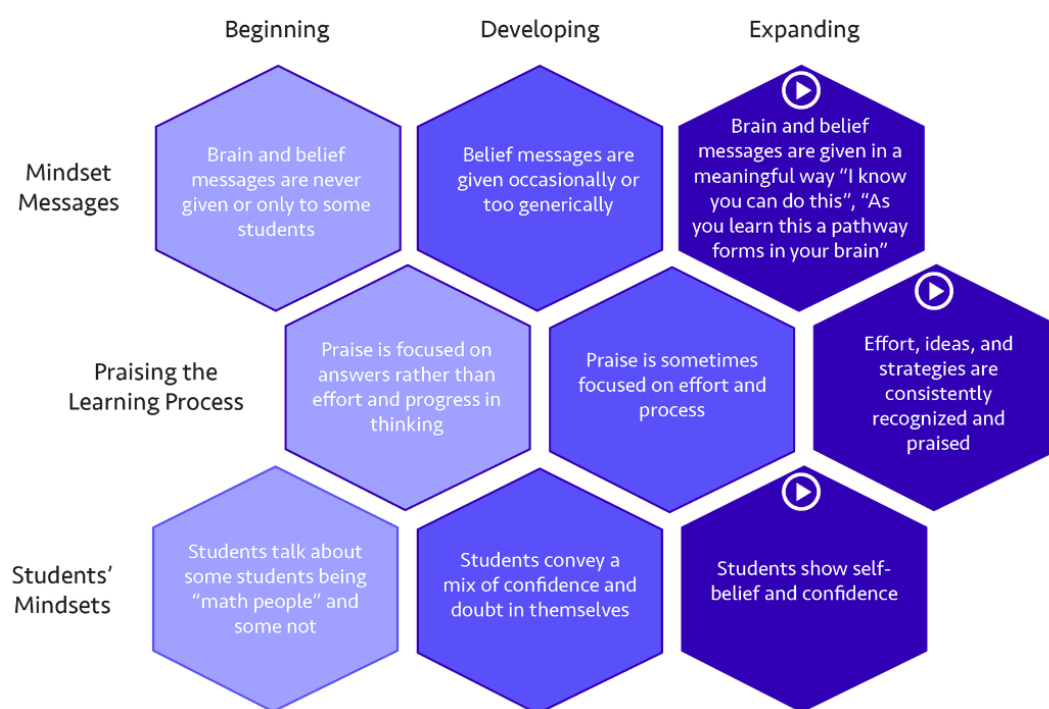
[Presentation Slides](#)

[Mathematical Mindset Teaching Rubrics](#)

Practice 1: Growth Mindset

- [Brain Plasticity Video](#)
- [Seeing Math Article](#)
- Self-Reflection

Mathematical Mindset Practice 1: Growth Mindset Culture



Practice 2: Nature of Mathematics

- Leo The Rabbit Task

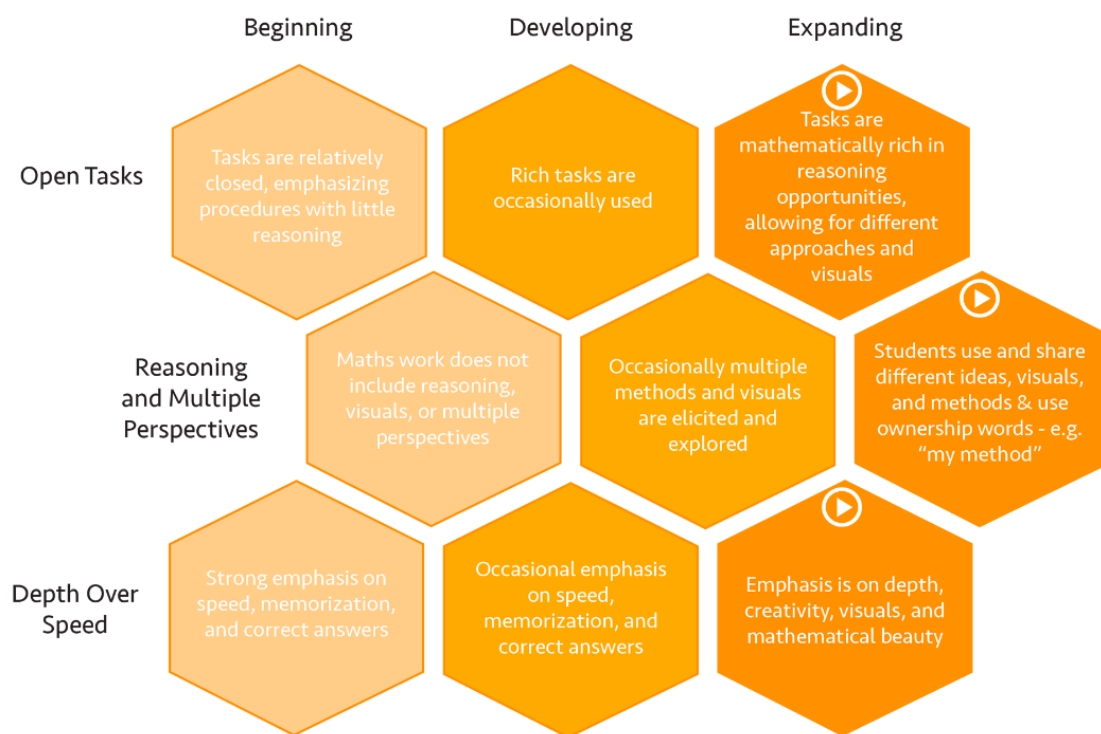
Leo the Rabbit

Leo the Rabbit is climbing up a flight of 10 steps. Leo can only hop up 1 or 2 steps each time he hops. He never hops down, only up. How many different ways can Leo hop up the flight of 10 steps? Provide evidence to justify your thinking.



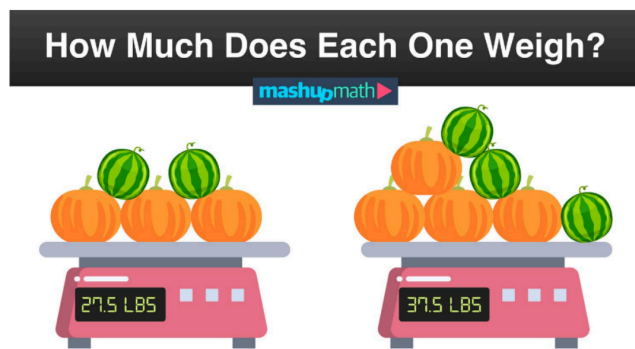
- Self-Reflection

Mathematical Mindset Practice 2: Nature of Mathematics



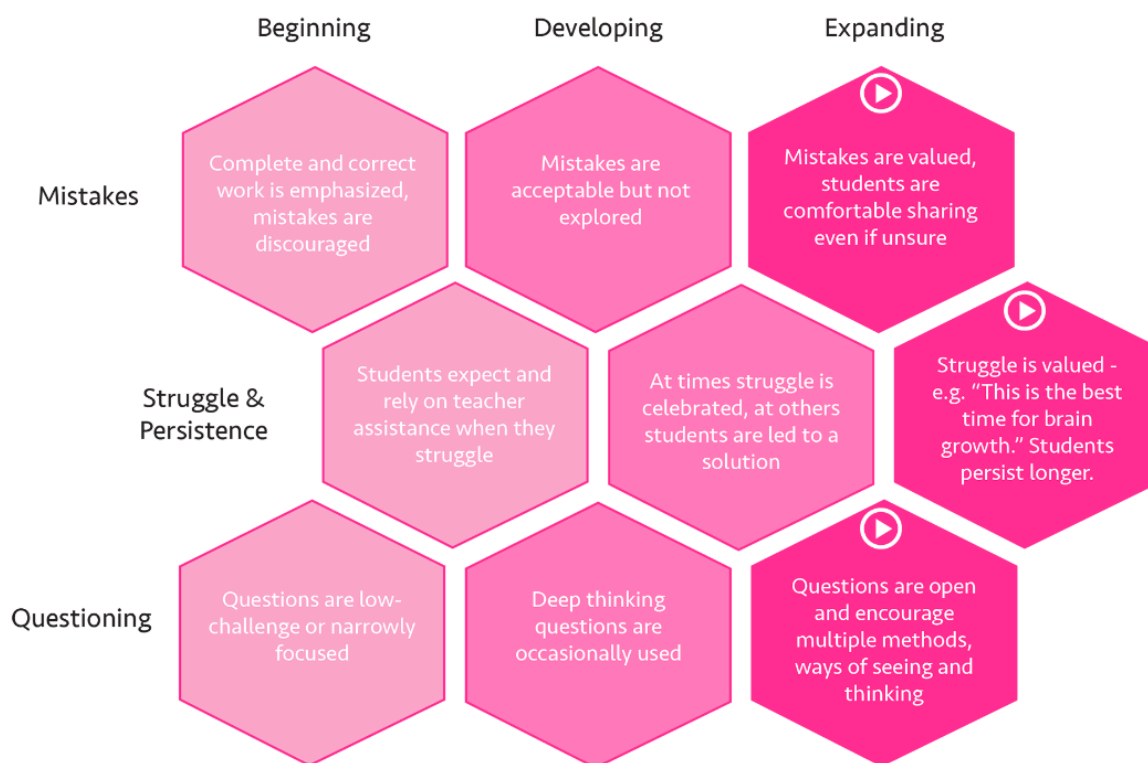
Practice 3: Challenge & Struggle

- Pumpkin & Watermelon Task



- Self-Reflection

Mathematical Mindset Practice 3: Challenge & Struggle

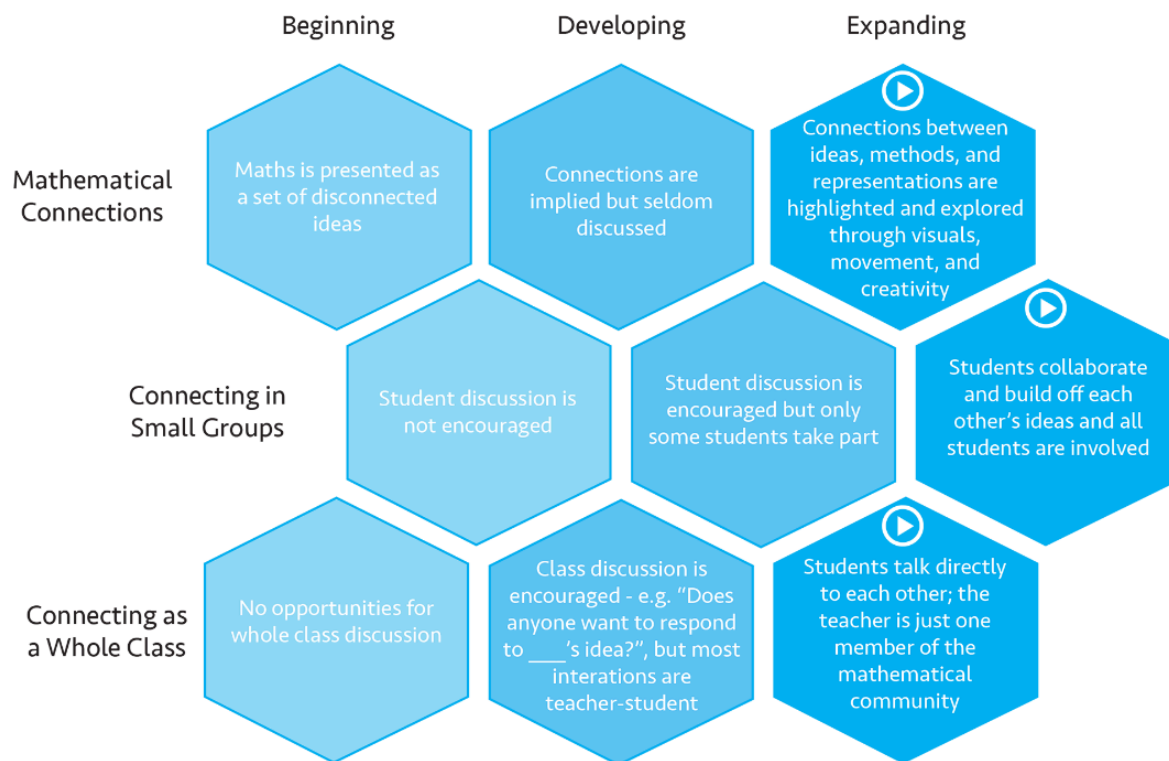


Practice 4: Connections & Collaborations

- Tangrams (Click [HERE](#) for digital tangrams)
 - What rectangles can you make with the same dimensions?

- Self-Reflection

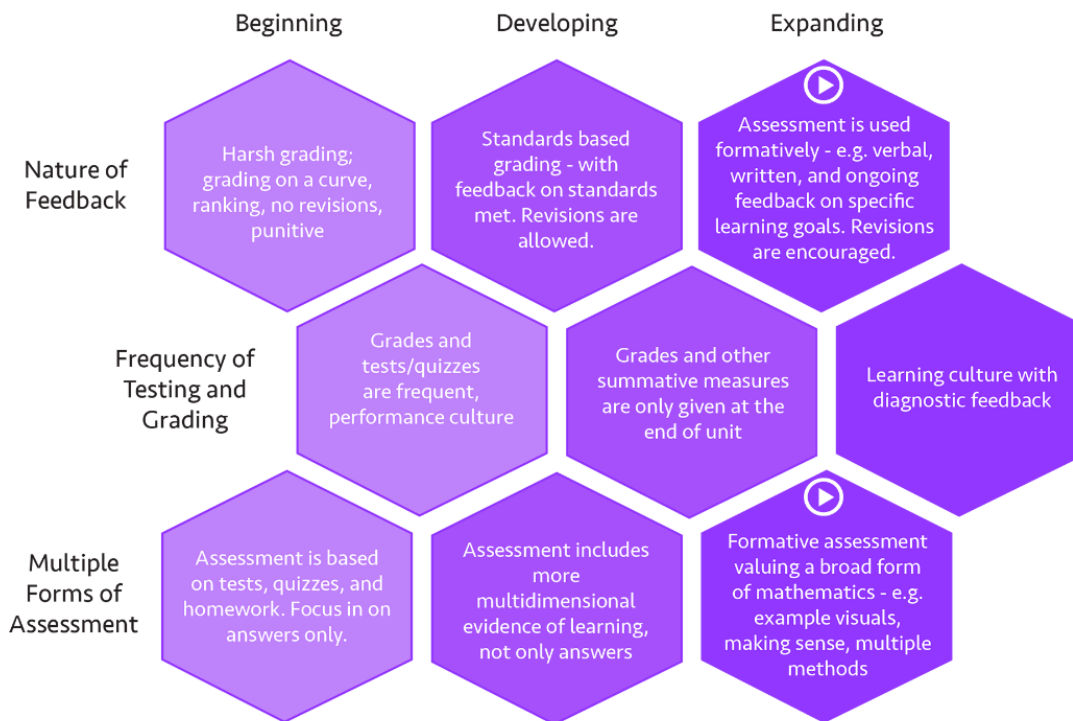
Mathematical Mindset Practice 4: Connections & Collaborations



Practice 5: Assessment

- [Assessment Article](#)
 - Group Readings
 - 1) Introduction & Whys
 - 2) Testing & Homework
 - 3) Case 1 & Case 2
 - 4) Case 3, Discussion, & Practices
- Self-Reflection

Mathematical Mindset Practice 5: Assessment



Launch:

“Until we change the way we teach math to emphasize learning and exploration, rather than performance, we’ll continue to produce students who describe their math experience as a hamster wheel, or worse, a prison. We’ll continue to produce anxious students who experience fear when they see numbers. The performance culture of mathematics has destroyed a vibrant, essential subject for so many people. As schools have worked to encourage a few speedy calculators, they’ve neglected to teach the kind of creative, quantitative thinking that can open new worlds. If we encourage new generations of students who love learning and love math, we’ll raise up kids who are prepared to take their place in society as free, empowered thinkers.”

- Jo Boaler