

Division 3: Mathematics

UNIVERSAL

Create structured opportunities for students to work collaboratively and independently to:

- develop and use mathematical language
- activate and build background knowledge
- reference and create models and exemplars
- use manipulatives and pictorial representations to explore and express learning
- use reflection to expand conceptual understanding of number operations
- connect numbers to their own real-life experiences.

TARGETED

Create scaffolded hands-on activities for students to work in small groups and independently to:

- learn and use mathematical words, using strategies such as word walls and the Frayer model
- create connections between personal experiences and new mathematical concepts, using strategies such as brainstorming, compare and contrast and concept maps
- use manipulatives, such as fraction circles and mathematical balances, to represent numbers and problems in a variety of contexts
- use visual models and supports, such as open array, open number lines, rekenreks, grid paper or place value mats
- revisit and review key concepts, using a variety of learning experiences connected to real-life experiences at home, at school and in the community
- develop and apply personal strategies, using strategies such as math journals and self-monitoring strategies such as think-alouds
- explore and use multiple ways to express learning, using strategies such as Mathematician's Chair.

INDIVIDUALIZED

Use direct teaching, repeated modelling and guided practice, and small group and individualized instruction to:

- create hands-on multisensory activities to introduce and explore new mathematics concepts and/or experiences
- support development of vocabulary related to numbers
- explore, discuss and record how numbers are used in the physical environment at school, at home and in the community
- have access to mathematics materials and visual prompts that are modified for ease of use
- create and use visual records from previous learning experiences, using photos, anchor charts and experience charts
- explore and record number operations and basic mathematics concepts, using visual prompts, concrete objects, pictures, photos and dramatizations.