

## Mathematical Processes

### REPRESENTING - LOOK FORs

**REPRESENTING:**

*Students will create a variety of representations of mathematical ideas (e.g., numeric, geometric, algebraic, graphical, pictorial; onscreen dynamic representations), and select and apply the appropriate representations to solve problems.*

Select an appropriate representation and defend their choice:

- physical/concrete/manipulative
- technology generated (e.g., graph, dynamic geometry representation, CAS)
- mental image
- numerical (e.g., table of values)
- graphical
- scale drawing or diagram
- graphical organizers (e.g., Venn diagram, T-chart, concept map)
- equation/algebraic expression/formula
- algorithm/logic model

Understand that various representations can be used to appropriately represent the same situation

Understand that there may be different variations of one representation (e.g., algebraic expressions may be equivalent yet appear different)

Understand the role of constants (e.g., parameters  $a$ ,  $k$ ,  $c$ ,  $d$ ) and variables (e.g.,  $x$ ,  $t$ ) in equations

Use multiple representations, as required