Math – Grade 3

Number

	4 - Excelling	3 - Meeting	2 - Approaching	1 - Working Below
Expectations included in all 4 strands	Consistently uses precise mathematical language	Routinely uses correct mathematical language	Sometimes uses correct mathematical language	Rarely uses correct mathematical language
	Consistently and independently makes appropriate connections among concrete, pictorial and symbolic representations	Routinely makes effective connections among concrete, pictorial and symbolic representations	Sometimes makes connections among concrete, pictorial and symbolic representations with support	Rarely makes connections among concrete, pictorial and symbolic representations
	Consistently and independently selects and applies appropriate strategies to solve a range of complex problems	Routinely selects and applies appropriate strategies to solve problems	Sometimes selects and applies appropriate strategies to solve problems	Rarely selects or applies appropriate strategies to solve problems
	Consistently and independently makes insightful connections between and within the different strands of mathematics	Routinely makes effective connections between and within the different strands of mathematics	Sometimes makes connections between and within the different strands of mathematics	Rarely makes connections between and within the different strands of mathematics
	Consistently counts, represents, compares, and orders a wide range of whole numbers and fractions accurately	Routinely and accurately counts, represents, compares and orders whole numbers and fractions	Sometimes counts, represents, compares and orders whole numbers and fractions accurately; may require pictorial or other models	Rarely counts, represents, compares and orders whole numbers and fractions; even with support
	Consistently makes connections between a wide range of whole numbers and fractions	Routinely makes connections between fractions and whole numbers	Sometimes makes connections between fractions and whole numbers	Rarely makes connections between fractions and whole numbers
	Consistently uses benchmarks and patterns effectively and efficiently	Routinely and effectively uses benchmarks and patterns	Sometimes uses benchmarks and patterns	Rarely uses benchmarks and patterns even with support
	Consistently uses referents and estimation strategies effectively and efficiently	Routinely and effectively uses referents and estimation strategies	Sometimes uses referents and estimation strategies	Rarely uses referents and estimation strategies even with support
	Makes efficient, logical estimates to predict outcomes and check for reasonableness	Routinely makes effective and logical estimates to predict outcomes and check for reasonableness	Sometimes makes effective and logical estimates to predict outcomes and check for reasonableness	Rarely makes logical estimates to predict outcomes or check for reasonableness
	Uses strategies (including mental math) effectively and efficiently	Routinely uses effective strategies (including mental math)	Sometimes uses effective strategies (including mental math)	Rarely uses strategies effectively
	Consistently explains strategies and reasoning with clarity, precision and thoroughness	Routinely and clearly explains strategies and reasoning	Sometimes explains strategies and reasoning; explanations may be incomplete	Has difficulty explaining strategies and reasoning
	Consistently selects and applies the correct operation to solve problems with accuracy	Routinely selects and applies the correct operation to solve problems with accuracy	Sometimes selects and applies the correct operation to solve problems	Rarely selects and applies the correct operation to solve problems
	Rarely makes minor errors	Few minor errors	Some major errors	Many major errors
	Evidence: (following Statistics and Probability section) **Glossary of key words**: (following Evidence section at end of document)			

Math – Grade 3

Patterns and Relations

4 - Excelling	3 - Meeting	2 - Approaching	1 - Working Below
Consistently uses precise mathematical language	Routinely uses correct mathematical language	Sometimes uses correct mathematical language	Rarely uses correct mathematical language
Consistently and independently makes connections among concrete, pictorial and symbolic representations appropriately	Routinely makes effective connections among concrete, pictorial and symbolic representations	Sometimes makes connections among concrete, pictorial and symbolic representations with support	Rarely makes connections among concrete, pictorial and symbolic representations
Consistently and independently selects and applies appropriate strategies to solve a range of complex problems	Routinely selects and applies appropriate strategies to solve problems	Sometimes selects and applies appropriate strategies to solve problems	Rarely selects or applies appropriate strategies to solve problems
Consistently and independently makes insightful connections between and within the different strands of mathematics	Routinely makes effective connections between and within the different strands of mathematics	Sometimes makes connections between and within the different strands of mathematics	Rarely makes connections between and within the different strands of mathematics
Consistently and independently identifies, describes, extends, compares and creates a wide range of patterns	Routinely and accurately identifies, describes, extends, compares and creates patterns	Sometimes identifies, describes, extends, compares and creates patterns	Rarely identifies, describes, extends, compares and creates patterns
Consistently and independently makes connections among a wide range of representations of patterns (concrete, pictorial, written/oral)	Routinely makes connections among various representations of patterns (concrete, pictorial, written/oral)	Sometimes makes connections among various representations of patterns (concrete, pictorial, written/oral)	Rarely makes connections among various representations of patterns (concrete, pictorial, written/oral)
Consistently and independently uses patterns to solve a wide range of problems	Routinely uses patterns to solve problems	Sometimes uses patterns to solve problems	Rarely uses patterns to solve problems
Consistently and independently explains patterns and reasoning with clarity, precision, and thoroughness	Routinely and clearly explains patterns and reasoning	Sometimes explains patterns and reasoning	Rarely explains patterns and reasoning
Consistently and independently represents, describes, and solves a wide range of equations	Routinely represents, describes and solves equations	Sometimes represents, describes, and solves equations	Rarely represents, describes, and solves equations
Rarely makes minor errors	Few minor errors	Some major errors	Many major errors

Expectations included in all 4 strands

Evidence: (following Statistics and Probability section)
Glossary of key words: (following Evidence section at end of document)

Math – Grade 3

Shape and Space

4 - Excelling	3 - Meeting	2 - Approaching	1 - Working Below
Consistently uses precise mathematical language	Routinely uses correct mathematical language	Sometimes uses correct mathematical language	Rarely uses correct mathematical language
Consistently and independently makes connections among concrete, pictorial and symbolic representations appropriately	Routinely makes effective connections among concrete, pictorial and symbolic representations	Sometimes makes connections among concrete, pictorial and symbolic representations with support	Rarely makes connections among concrete, pictorial and symbolic representations
Consistently and independently selects and applies appropriate strategies to solve a range of complex problems	Routinely selects and applies appropriate strategies to solve problems	Sometimes selects and applies appropriate strategies to solve problems	Rarely selects or applies appropriate strategies to solve problems
Consistently and independently makes insighthe different strands of mathematics	Routinely makes effective connections between and within the different strands of mathematics	Sometimes makes connections between and within the different strands of mathematics	Rarely makes connections between and within the different strands of mathematics
Consistently and independently estimates, uses referents, and measures time, length, perimeter and mass, appropriately with correct units	Routinely and appropriately estimates, uses referents and measures time, length, perimeter and mass, with correct units	Sometimes estimates, uses referents, and measures time, length, perimeter and mass, appropriately with correct units	Has difficulty estimating, using referents, and measuring time, length, perimeter and mass, appropriately with correct units
Consistently uses referents and estimation strategies effectively and efficiently	Effectively uses referents and estimation strategies	Sometimes uses referents and estimation strategies	Has difficulty using referents and estimation strategies effectively
Consistently explains strategies and reasoning with clarity, precision, and thoroughness	Routinely and clearly explains strategies and reasoning	Sometimes explains strategies and reasoning, or explanations may be incomplete	Has difficulty explaining strategies and reasoning
Consistently identifies, describes, constructs and sorts a wide range of 3-D objects using attributes	Routinely identifies, describes, constructs and sorts 3-D objects using attributes	Sometimes identifies, describes, constructs and sorts 3-D objects using attributes	Has difficulty identifying, describing, constructing and sorting 3-D objects using attributes
Consistently identifies, describes, creates and sorts a wide range of polygons using attributes	Routinely identifies, describes and sorts polygons using attributes	Sometimes identifies, describes and sorts polygons using attributes	Has difficulty identifying, describing and sorting polygons using attributes
Consistently uses precise labels (including units) in diagrams	Routinely uses appropriate labels (including units) in diagrams	Sometimes uses appropriate labels (including units) in diagrams	Rarely uses appropriate labels (including units) in diagrams
Rarely makes minor errors	Few minor errors	Some major errors	Many major errors

Expectations included in all 4 strands

Evidence: (following Statistics and Probability section)
Glossary of key words: (following Evidence section at end of document)

Statistics (Statistics and Probability)

Expectations included in all 4 strands

4 - Excelling	3 - Meeting	2 - Approaching	1 - Working Below
Consistently uses precise mathematical language	Routinely uses correct mathematical language	Sometimes uses correct mathematical language	Rarely uses correct mathematical language
Consistently and independently makes connections among concrete, pictorial and symbolic representations appropriately	Routinely makes effective connections among concrete, pictorial and symbolic representations	Sometimes makes connections among concrete, pictorial and symbolic representations with support	Rarely makes connections among concrete, pictorial and symbolic representations
Consistently and independently selects and applies appropriate strategies for collecting data to solve a range of complex problems	Routinely selects and applies appropriate strategies to solve problems	Sometimes selects and applies appropriate strategies to solve problems	Rarely selects or applies appropriate strategies to solve problems
Consistently and independently makes insightful connections between and within the different strands of mathematics	Routinely makes effective connections between and within the different strands of mathematics	Sometimes makes connections between and within the different strands of mathematics	Rarely makes connections between and within the different strands of mathematics
Consistently and independently selects appropriate strategies for collecting data to solve a wide range of problems	Routinely selects appropriate strategies for collecting data to solve problems	Sometimes selects appropriate strategies for collecting data to solve problems	Rarely selects appropriate strategies for collecting data to solve problems
Consistently and independently organizes data in a way appropriate to purpose, and to solve a wide range of problems (tally system, line plot, chart, list, bar graph)	Routinely organizes data in a format appropriate to purpose, and to solve problems (tally system, line plot, chart, list, bar graph)	Sometimes organizes data in a way appropriate to purpose, and to solve problems (tally system, line plot, chart, list, bar graph)	Rarely organizes data in a way appropriate to purpose, and to solve problems (tally system, line plot, chart, list, bar graph)
Consistently and independently includes precise labels and headings in tables and graphs	Routinely includes appropriate labels and headings in tables and graphs	Sometimes includes appropriate labels and headings in tables and graphs	Rarely includes labels and headings in tables and graphs
Consistently interprets a wide range of data appropriately to answer questions and solve problems	Routinely interprets data appropriately to answer questions and solve problems	Sometimes interprets data appropriately to answer questions and solve problems	Has difficulty interpreting data appropriately to answer questions and solve problems
Consistently and independently explains strategies and reasoning with clarity, precision, and thoroughness	Routinely and clearly explains strategies and reasoning	Sometimes explains strategies and reasoning, or explanations may be incomplete	Has difficulty explaining strategies and reasoning
Rarely makes minor errors	Few minor errors	Some major errors	Many major errors

Evidence: (following Statistics and Probability section)
Glossary of key words: (following Evidence section at end of document)

Evidence of Learning: Suggested Sources

Observations:

- Observe students using models (materials and manipulatives) and diagrams
- Observe students playing games.
- Observe students completing tasks
- Observe student presentations and demonstrations
- Use listening checklist of mathematical language
- Notes from guided math sessions
- "Gallery" walks

Conversations (oral/written):

- Conferences
- Interviews
- Whole class and group discussions
- Guided tasks
- Math talks
- Math journal entry
- Exit slips (written responses)
- Self- and peer assessment and reflection

Products:

- Quizzes (oral/written)
- Projects
- Tests
- Graphs
- Song, poem, art
- Work samples
- Exit slips or other responses to questions
- Math journal entry
- Photos of student use of models
- Group problem solving records
- Portfolios

Glossary

Appropriate: is aligned with the expectations of the curriculum document (e.g., *Routinely selects and applies appropriate strategies to solve problems)*.

Benchmarks: numbers used to compare and order other numbers (e.g., 5, 10, 25, 50, 100).

Concrete representation: using materials/manipulatives (e.g., counters, pattern blocks) to show a mathematical concept or solve a problem

Consistently: always acting or behaving in the same way and of the same quality

Effective: approach used consistently provides an accurate solution

Efficient: approach used has minimal number of steps (based on the expectations of the curriculum) and consistently provides an accurate solution

Pictorial representation: using drawings/diagrams (e.g., drawings of the model, number lines) to show a mathematical concept or solve a problem

Rarely: not often; even with support

Referent: a concrete representation of a quantity or a unit of measurement (it is helpful if the representation is personally meaningful)

Routinely: done very often with no support

Sometimes: occasionally and/or with support

Subitizing: using familiar arrangements of objects to determine how many there are without counting (e.g., dice)

Symbolic representation: using numbers and mathematical symbols (e.g., 9, +, ÷) to show a mathematical concept or solve a problem