Math - Grade 1

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 (including skip counting), represents, compares and orders a wide range of whole numbers accurately	Routinely and effectively counts (including skip counting), represents, compares and orders whole numbers accurately	Sometimes counts (including skip counting), represents, compares and orders whole numbers accurately; may require pictorial or other representations	Has difficulty counting (including skip counting), representing, comparing and ordering whole numbers, even with concrete or pictorial representations
	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
	Consistently uses referents, subitizing, and estimation strategies effectively and efficiently	Routinely and effectively uses referents, subitizing, and estimation strategies	Sometimes uses referents, subitizing, and estimation strategies	Rarely uses referents, subitizing, and estimation strategies
	Consistently and independently makes connections among addition, subtraction and problem situations	Routinely makes connections among addition, subtraction and problem situations	Sometimes makes connections among addition, subtraction and problem situations	Has difficulty making connections among addition, subtraction and problem situations
	Consistently uses strategies (including mental math) effectively and efficiently	Routinely uses strategies (including mental math) effectively	Sometimes uses strategies (including mental math) effectively	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, 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 Shape and Space section) **Glossary of key words**: (following Evidence section at end of document)			

Patterns and Relations

	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 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 (written/oral, pictorial, objects, sounds, actions)	Rarely makes connections among various representations of patterns (concrete, pictorial, sounds, actions, 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	Has difficulty explaining patterns and reasoning
	Consistently and independently represents, describes, and solves a wide range of equations	Routinely represents and explains equality and inequality	Sometimes represents and explains equality and inequality	Rarely represents, describes, and solves equations
	Rarely makes minor errors	Few minor errors	Some major errors	Many major errors
	Evidence: (following Shape and Space section) **Glossary of key words**: (following Evidence section at end of document)			

Shape and Space

	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 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 identifies and explains attributes of objects (length, height, mass/weight, volume/capacity and area)	Routinely identifies attributes of objects (length, height, mass/weight, volume/capacity and area)	Sometimes identifies attributes of objects (length, height, mass/weight, volume/capacity and area)	Rarely identifies attributes of objects (length, height, mass/weight, volume/capacity and area)
	Consistently compares and orders a wide range of objects using attributes	Routinely compares and orders objects using attributes	Sometimes compares and orders objects using attributes	Rarely compares and orders objects using attributes
	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 describes, replicates, compares and sorts a wide range of 3-D objects and 2-D shapes using attributes	Routinely describes, replicates, compares and sorts 3-D objects and 2-D shapes using attributes	Sometimes describes, replicates, compares and sorts 3-D objects and 2-D shapes using attributes	Rarely describes, replicates, compares and sorts 3-D objects and 2-D shapes using attributes
	Consistently uses precise labels in diagrams	Routinely uses appropriate labels in diagrams	Sometimes uses appropriate labels in diagrams	Rarely uses appropriate labels in diagrams
	Rarely makes minor errors	Few minor errors	Some major errors	Many major errors
	Evidence: (following Shape and Space 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