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ABSTRACT

This profile is designed as a recording sheet for monitoring an individual student's progress throughout the school year. First grade assessment materials and the "Strategies for Instruction in Mathematics" suggest tasks and questions that can be used for on-going and summative assessment. Directions for use and descriptions of levels of performance are presented. (ASK)

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# Mathematics

## First Grade

# Observation Profile for On-Going Assessment and End of the Year Evaluation

ED 435 536

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This profile is designed as a recording sheet for monitoring an individual student's progress throughout the school year. First grade assessment materials and the *Strategies for Instruction in Mathematics* suggest tasks and questions that can be used for on-going and summative assessment.

### Directions for use:

The four main mathematical goals and the specific objectives from the North Carolina *Standard Course of Study* are clustered on this profile according to "big ideas." There are six boxes for recording a student's performance level (1, 2, 3, or 4) at each grading period as some school systems have six grading periods, while others have four grading periods. Teachers will use only the boxes needed. The hexagon beside each "big idea" is for the teacher's summative evaluation and will be filled in at the end of the year.

It is suggested that teachers record an evaluation (performance level) for each objective that is taught during a particular grading period; it is not necessary to record an evaluation for objectives that have not been addressed. Student work, conversations with the student, and observations provide evidence for the evaluation of performance. Evaluations are based on the student's abilities to explain, model, and apply learning. Student work folders (or portfolios) will support the evaluation.

Public Schools of North Carolina  
State Board of Education  
Department of Public Instruction



**First Grade Observation Profile for On-Going Assessment and End of the Year Evaluation**  
 Number Sense, Numeration, and Numerical Operations - Spatial Sense, Measurement, and Geometry - Patterns, Relationships, and Functions - Data, Probability, and Statistics

**Descriptions of levels of Performance**

- Level IV (Exceeds expectations)
  - consistent performance beyond grade level
  - works independently
  - understands advanced concepts
  - applies strategies creatively
  - analyzes and synthesizes
  - shows confidence and initiative
  - justifies and elaborates responses
  - makes critical judgements
  - makes applications and extensions beyond grade level; applies Level III competencies in more challenging situations

**Level III (Proficient)**

- exhibits consistent performance
- shows conceptual understanding
- applies strategies in most situations
- responds with appropriate answer or procedure
- completes tasks accurately
- needs minimal assistance
- exhibits fluency and applies learning
- shows some flexibility in thinking
- works with confidence
- recognizes cause and effect relationships
- applies, models, and explains concepts

**Level II (Not yet proficient)**

- exhibits inconsistent performance and misunderstandings at times
- shows some evidence of conceptual understanding
- has difficulty applying strategies or completing tasks in unfamiliar situations
- responds with appropriate answer or procedure sometimes
- requires teacher guidance frequently
- needs additional time, opportunities
- demonstrates some Level III competencies but is inconsistent

**Level I (Limited performance)**

- exhibits minimal performance
- shows very limited evidence of conceptual understanding and use of strategies
- responds with inappropriate answer and/or procedure frequently
- very often displays misunderstandings
- completes task appropriately and accurately infrequently
- needs assistance, guidance and modified instruction

**Using number**

- 1.01 Count using one-to-one correspondence to 30.
- 1.02 rote count by 1's, 5's and 10's to 100; by 2's to 20.
- 1.03 Make sets and match numerals up to 30.
- 1.04 Compare and order sets and numerals up to 30.
- 1.05 Read and write numerals to 100.
- 1.06 Read number words zero to ten.
- 1.07 Use ordinal numbers first through tenth.
- 1.08 Group and count objects by 2's, 5's, and 10's.
- 1.09 Identify one more/less before/after/between.
- 1.10 Identify equal and unequal numerals and sets.
- 1.11 Represent numbers in a variety of ways: using tallies, building models to 100.
- 1.13 Group objects into tens and ones, recognize models; record.
- 2.08 Divide regions into two, three, and four equal parts.

**Computing**

- 1.14 Model concept of addition; know the combinations for sums to 10.
- 1.15 Model concept of subtraction as take-away, comparison, and missing addends.
- 1.16 Model the division of sets into two, three or four equal parts; explain solution.
- 1.17 Relate addition and subtraction to symbolic notation and write equations.
- 1.18 Find sums and differences using counting strategies such as counting on and counting back.
- 1.19 Memorize addition and subtraction facts to 10.
- 1.20 Model 10 more/less to 100.
- 1.21 Model 2-digit addition/subtraction with multiples of 10 to 100.

**Solving problems**

- 1.12 Estimate quantities up to 30. Recognize when solutions to problems are reasonable.
- 1.22 Create and solve problems using addition and subtraction. Use problem-solving strategies: modeling with manipulatives, acting out, drawing, using diagrams; use calculators as appropriate. Explain solutions.

**Applying geometric concepts**

- 2.01 Recognize, identify, and describe plane geometric figures: circle, square, triangle, rectangle.
- 2.02 Recognize plane geometric figures: hexagon, trapezoid, and parallelogram.
- 2.03 Recognize basic three-dimensional (solid) figures: sphere, cube, cylinder and cone.
- 2.04 Identify open and closed figures.
- 2.05 Use directional and positional words.
- 2.06 Describe and compare characteristics of geometric figures.

**Using measurement concepts**

- 2.07 Identify equal and unequal measures and regions.
- 2.09 Use non-standard units to estimate and measure length, weight, and capacity; record results.

**Dealing with data**

- 4.01 Gather, organize and display information as a group activity.
- 4.02 Answer questions about charts and graphs.
- 4.03 Make predictions based on experiences.
- 4.04 Create concrete, pictorial, and symbolic graphs using prepared grids.

2.10 Use calendar language appropriately, e.g. seasons and months of the year, today, yesterday, tomorrow, next week, last month.

2.11 Tell time to nearest hour using digital and analog clocks.

Using patterns/relationships

3.01 Describe and compare objects by their attributes; order sets.

3.02 Sort a set of objects in more than one way; sort by own rules and explain.

3.03 Copy, continue, and record patterns with actions, words and objects; translate into other forms.

3.04 Create and record patterns. Identify and name the pattern unit or numerical sequence.

3.06 Identify patterns in the environment.

2.12 Solve problems involving non-standard measurement and explain strategy.

2.13 Solve spatial visualization puzzles and tasks; use visual memory.

3.05 Solve problems by identifying and correcting errors in repeating patterns.

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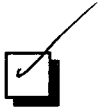


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