Students are expected to:

A. Model understanding of spatial sense through actions tied to the following words: left, right, up, down, top, bottom, middle, between, beside, above, below, over, under, behind, in front of, around, on, off, before, after, through, first, and last. EXAMPLE: Stand on the left side of John. Sit in front of Mary.

B. Identify and describe a circle, square, triangle, and a rectangle, in the environment. EXAMPLE: Recognize and describe the square tabletop in the classroom.

C. Given objects, children will sort and classify by attributes including shape. EXAMPLE: Student will place all the round objects in one group and all the square objects in another group.

D. Reproduce circles, squares, triangles, and rectangles, using geoboards, clay, paper, blocks, etc.

Performance Skill:

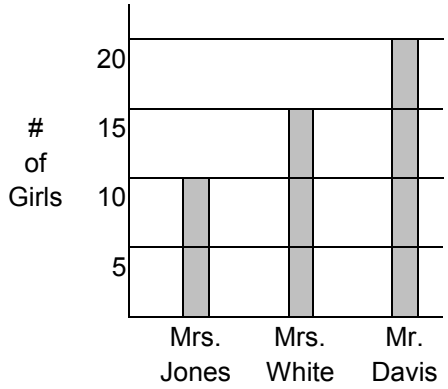
Collect and Use Data

Experiences in collecting, organizing, and displaying objects and information give children content from which to compare numerical information. Children count and compare, question and discuss, organize and make decisions when working with data. The one-to-one correspondence clearly evident in a graph helps children answer many comparison questions about the set of data.

Students are expected to:

A. Organize objects by sorting and classifying, according to attributes. EXAMPLE: Put all of the round objects in one set (group). Put all of the square objects in another set (group).

B. Explain a graph and answer questions pertaining to the graph.



Question: How many girls are in Mrs. White's classroom?

C. Create a graph on a grid using given information. EXAMPLE: Using a grid, students will create a graph showing how many boys are in each classroom.

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If you have any questions, please feel free to contact your child's teacher.

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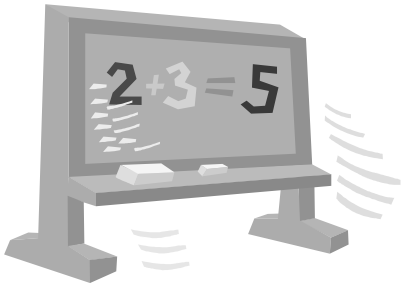
Galesburg Kindergarten Academic Expectations for Mathematics



The teachers and administrators who work with kindergarten students have developed a very specific curriculum for mathematics. Assisted by consultants, our educators have specifically identified what kindergarten students are expected to know and be able to do in the area of mathematics at the end of kinder-garten. This curriculum has been named Kindergarten Academic Expectations. It defines each of the Performance Skills on the Kindergarten Report Card.

Performance Skill:

Number Sense

Children need to experience mathematics as problem solving, investigating, seeing what happens if…, and using mathematics to find out things for themselves that they do not already know.

Students are expected to:

A. Solve problems involving numbers in a variety of situations.
B. Experience sorting and classifying objects into sets and independently create sets. EXAMPLE: Put buttons into sets (groups) by shape. Create new sets (groups) such as by color.
C. Sort to match objects between sets in one-to-one correspondence (to 12). Using one-to-one correspondence, children will match objects from two sets. EXAMPLE: Match buttons that have the same number from two different groups.
D. Compare and order sets to 12 using objects. Experiences will focus on the language of comparing and ordering, such as more, fewer, less, equal, greater. EXAMPLE: How many are in the set (group)? Which set has more? Which set has less?
E. Demonstrate conservation of number to five through the process of modeling. A variety of experiences will be provided to develop understanding that a particular amount is not changed, even though it seems different in some way. EXAMPLE: Five checkers are the same if they are grouped together or spread out.
F. Experience and show the relationships between numbers and the parts that make up numbers. EXAMPLE: Use models to demonstrate concepts of addition and subtraction in everyday situations.
G. Count objects to 30 and understand that numbers are used to describe quantity and relationships.

Students are expected to (Continued):

H. Count accurately and efficiently from any given number to 30, and count back from 10 to 0.
I. Use symbols to represent numerical ideas. Identify numerals, 0 to 30, on a calendar, by page number, in context, and out of sequence.
J. Sequence numerals to 30 (in order) incorporating language to describe sequencing, such as before, after, and between. EXAMPLE: 15 comes before 18; 20 comes after 17; 18 it between 16 and 20.
K. Write numerals to 30 in sequence, to 10 out of sequence.
L. Experience dividing an object into equal parts in a variety of everyday situations. EXAMPLE: Decide how to divide a pizza equally between 6 people.
M. Use sets of objects to show equal parts by sharing, in a variety of everyday situations. EXAMPLE: Decide how to divide 15 M&M's among 3 children.

Performance Skill:

Measurement

Measurement for the young child is an important way to look for relationships in the real world. Children should have opportunities to figure out their own ways of measuring, using a variety of non-standard units. Measurement activities often give children a reason to count.

Students are expected to:

A. Estimate and compare using non-standard units: length, weight, and volume. EXAMPLE: Which object is longer? Which object weighs more? Which container holds more water?

Performance Skill:

Patterns

Patterns can be experienced in a variety of ways, not only in numbers, but in actions, designs, arrangements, and in recurring events, such as seasons and days of the week. Children need to be able to recognize, create, and interpret patterns. They need to use their understanding of pattern as a tool for solving and making predictions.

Students are expected to:

A. Explore and recognize patterns represented using objects, actions, or sounds. Explain or justify orally. Patterns should include the following: AB, AABB, AAB, ABB, ABC.
B. Copy and extend a simple pattern. Patterns should include AB and one other. EXAMPLE: ABAB The student should be able to extend this pattern.
C. Create and explain a simple pattern using objects, actions, or sounds. EXAMPLE: The student should be able to create a pattern of one red checker, one black checker, one red checker, etc.

Performance Skill:

Geometry

Geometry and spatial explorations should give children opportunities to compare objects; to classify and arrange them according to attributes such as size and shape; to experiment with patterns, symmetry, and balancing; and to explore relationships of size, direction, and position in space. Hands-on materials include using geoboards and puzzles to explore geometric figures, and to develop hand-eye coordination and small muscle skills.