D. Translate patterns into different forms. **EXAMPLE:** *The students should be able to complete the following: Using dimes and nickels, how could you create the pattern below with coins?*

A B B A B B A B B

Performance Skill:

Apply Geometric Concepts

Students are expected to:

A. Identify and describe 2- and 3-dimensional geometric figures in the environment. **EXAMPLE:** *The student should be able to recognize squares, rectangles, circles, and triangles in his/her surroundings and tell why the object is that shape.*

B. Identify and describe practical examples of 2-dimensional geometric figures in the environment. **EXAMPLE:** *The student should be able to tell if a table is a square or a rectangle and explain why.*

C. Sort, classify, and compare characteristics, similarities, and differences of geometric shapes. **EXAMPLE:** *Given objects that are circles, squares, rectangles, and triangles, the student is expected to place the objects in the correct group, based on certain characteristics, and explain why the objects are in the group.*

D. Determine whether a shape has a line of symmetry. **EXAMPLE:** *Given an object or picture of an object, the student should be able to recognize if there is a line that divides the object so that one side is the exact opposite of the other.*

YES NO

E. Demonstrate spatial sense by filling a region using different objects. **EXAMPLE:** *The student is expected to cover an area using a set of small objects so there are no holes.*

Performance Skill:

Collect and Use Data

Students are expected to:

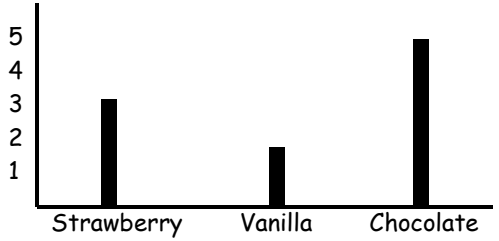
A. Organize and use data. **EXAMPLE:** Given information about 10 people who chose which flavor of ice cream they prefer (chocolate, vanilla, or strawberry ice cream), the student can represent the information in either a picture, table, chart, graph, or tally.

Students are expected to (Continued):

Example of a Table:

Ice Cream Choices	
Strawberry	3
Vanilla	2
Chocolate	5

Example of a Graph:



B. Classify, order, and sort objects by attributes in different ways and explain reasons used. **EXAMPLE:** *Given a group of toys, the student should be able to group them by common characteristics and explain why.* **EXAMPLE:** *Toys with wheels and toys without wheels. The student should be able to sort the same group of toys a second way.* **EXAMPLE:** *The color of the toys, and explain why.*

C. Interpret graphs and charts verbally or in writing by answering questions, and/or making predictions. **EXAMPLE:** *Given the chart about ice cream preferences (ice cream chart above) the student should be able to describe how many people like each flavor of ice cream.*

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

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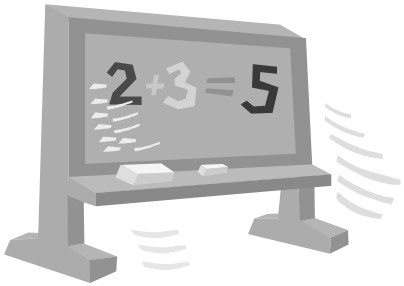
Galesburg First Grade Academic Expectations for Mathematics



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

Performance Skill:

Demonstrate Number Sense

Students are expected to:

A. Demonstrate one-to one correspondence and con-serve number to 10. **EXAMPLE:** *Students demonstrate that they understand that the number of objects does not increase or decrease when they are rearranged (i.e., 10 checkers are the same if they are grouped together or spread out).*

B. Compare sets (groups) of objects to 20 orally and/or in writing. **EXAMPLE:** *Compare sets (groups). How many are in the set? Which set has more? Which set has less? Put sets in order from the least to the greatest.*

C. Read, write, order, and compare whole numbers 0 to 99 as numerals. **EXAMPLE:** *Read or write the number that comes before 52. Read or write the number that comes after 22. Read or write a number that comes between 11 and 19.*

D. Use problem solving to solve a variety of real-life problems. The use of manipulatives is acceptable. **EXAMPLE:** *Kim had four doughnuts, Bill had 3, and Lee had 5. They wanted to share them equally. How will they do that? Explain your answer.*

E. Use counting strategies such as counting on, counting back, and skip counting. **EXAMPLE:** *Count backward from 79. Count up from 35. Start at 15 and count by 5's.*

F. Demonstrate counting, grouping, and place value concepts of two-digit numbers. **EXAMPLE:** *A student should be able to group objects such as popsicle sticks into sets of 2's, 5's, and 10's. A student should be able to determine place value of two-digit numbers such as: 23 has ___ tens and ___ ones.*

G. Demonstrate understanding of concepts of addition/subtraction. **EXAMPLE:** *A student draws a picture and then writes a story about each of the following math problems: 4 - 2 = 2 and 6 + 3 = 9.*

H. Demonstrate understanding of fact families to 12. **EXAMPLE:** *Using three numbers given 3, 4, and 7, write two different addition facts and two different subtraction facts (i.e., 3 + 4 = 7; 4 + 3 = 7; 7 - 3 = 4; 7 - 4 = 3).*

Students are expected to (Continued):

H. Estimate and compute using models, mental math, paper and pencil, calculators, or computers. **EXAMPLE:** *Mental Math: When you count, what comes before 20? Finish the pattern 45, 50, 55, ___, ___. Estimate using models: Estimate how many beans are in your hand and then count them.*

I. Demonstrate fractional parts of halves, fourths, and thirds using manipulatives. **EXAMPLE:** *Decide how to divide a pizza equally among 6 people.*

J. Write and solve addition and subtraction number sentences using boxes to represent unknowns.

3 + ☐ = 7 12 - ☐ = 8

L. Use various strategies such as counting on, counting back, doubles, fact families, and ten frames to find sums and differences to 12. **EXAMPLES:**

Counting on: 7 + 2 1 + 9
Doubles: 3 + 3 5 + 5
Near Doubles: 5 + 6 4 + 5
Ten Frames 6 + 4 = 10

****** + **** = 10**

Counting Back: 7 - 3 9 - 2
Subtraction Doubles: 12 - 6 8 - 4
Next-Door Neighbors: 7 - 6 9 - 8
Count-ups or Almost Next-Door Neighbors: 9 - 7 10 - 7
Zeros 6 - 6 9 - 0

Performance Skill:

Make, Use, and Estimate Measurement

Students are expected to:

A. Use and interpret information from a monthly calendar. **EXAMPLE:** *Use a calendar for the month of September to answer the following questions: What day of the week is September 15th on? How many Mondays are there in September? How many days are there in September?*

Performance Skill:

Make, Use, and Estimate Measurement

Students are expected to (Continued):

B. Estimate and measure with non-standard units: weight, volume, and length. **EXAMPLE:** *Use 3 objects such as a book, a pen, and a paper clip. Student should be able to estimate length of each item in unifix cubes and record estimates. Student should be able to estimate the order from lightest to heaviest, then measure and record results.*

C. Identify and give value of penny, nickel, dime, and quarter. **EXAMPLE:** *The student should be able to identify a penny, nickel, dime, and quarter, and tell how much each is worth.*

D. Determine different combinations of coins needed to buy an item. **EXAMPLE:** *A student should be able to use a combination of a penny, nickel, dime, and quarter to purchase items.*

E. Read, record, and model time from analog and digital clocks to the hour and half-hour. **EXAMPLE:** *Student can read 3:00 PM and 3:30 PM on both an analog and a digital clock.*

Performance Skill:

Patterns

Students are expected to:

A. Recognize and extend a pattern other than AB, AB. **EXAMPLE:** *The students should be able to recognize a pattern similar to:*

○ ☐ ☐ ○ ☐ ☐

The student should also be able to extend the pattern using bread tags or similar objects.

B. Create and explain a pattern using pictures, objects, or symbols. **EXAMPLE:** *The student should be able to create a pattern of two red checkers followed by one black checker. He/She should be able to repeat the pattern and explain the pattern.*

C. Find and correct errors in patterns. **EXAMPLE:** *There is a mistake in the pattern below. Where is it and how can you fix it?*

A B C A B C A B A