

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = 15$$

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Can you find another way? $\underline{\quad} + \underline{\quad} + \underline{\quad} = 15$

Performance Skill: Geometry

We study geometry to understand the shapes and dimensions of our world.

Students are expected to:

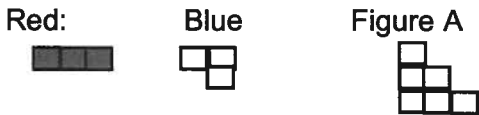
1. Investigate and reason about properties of two- and three-dimensional objects by describing, sorting, classifying, comparing, contrasting, and creating. **Example:** Which of the following shapes will roll? a) cube b) cylinder c) pyramid d) rectangular prism. Explain. Can you describe how someone would know which shapes would roll without rolling them?

2. Determine properties of shapes or figures including congruence and symmetry. **Example:** Which shape has more lines of symmetry?



3. Recognize, describe, and create lines, line segments, intersections, and angles in context. **Example:** Using a map of Galesburg, which streets are intersecting; parallel; and form right angles?

4. Determine how different shapes can cover the same area (conservation of area) and predict and describe the resulting 3-dimensional shape formed from a 2-dimensional drawing. **Example:** Use red and blue pieces to cover the Figure A.



Performance Skill: Probability and Statistics

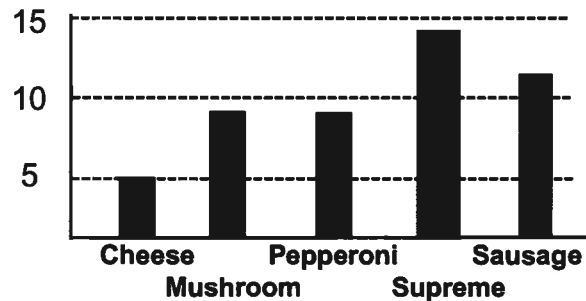
Students are expected to:

1. Read, understand, and interpret data as well as create tables, charts, or graphs.

Example: Create a table showing results of a survey of 50 people about their favorite pizza topping.

Favorite Pizza Topping		
Cheese		
Pepperoni		
Sausage		
Mushrooms		
Supreme		

2. Collect and organize data to answer questions generated from real-life investigations. **Example:** Use the data from the above table to create a graph. Answer questions by examining the graph.



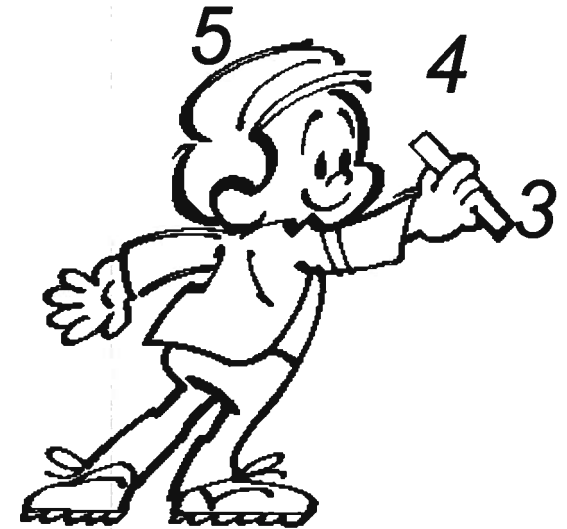
3. Predict and experiment to determine the probability of the occurrence of an event.

Example: Given a bag containing 5 red, 3 blue, and 2 green cubes, what are the chances of picking a green cube?

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If you have any questions, please feel free to contact your child's teacher.
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Galesburg Third Grade Academic Expectations for Mathematics



The teachers and administrators who work with 3rd grade students have developed a very specific curriculum for mathematics. Assisted by consultants, our educators have specifically identified what third graders are expected to know and be able to do in the area of mathematics at the end of grade three. This curriculum has been named the Third Grade Academic Expectations. It defines each of the Performance Skills on the Third Grade Report Card.

In the process of developing an understanding of mathematics, 3rd grade students will engage in problem solving, in using the language of mathematics, in estimating and rounding, and in using the tools of mathematics.

Performance Skill: Number Sense

Number sense is understanding what numbers mean, how they relate to one another, their relative size, how they can be thought about and represented in many ways, and the effect of operating with numbers. (NCTM)

Students are expected to:

1. Extend their understanding of place value concepts by adding and subtracting three- and four-digit numbers using models and procedures. **Example:** Which problem will produce the greatest answer? $300 + 30 + 3$; $30 + 3 + 30$; or $3 + 3000 + 3$.
2. Demonstrate an understanding of numerals through four digits by using standard and expanded forms. **Example:** Write standard numeral for 3 thousands, 4 hundreds, 6 tens, and 2 ones. _____

Write expanded numeral for 7,952.

Thousands Place	Hundreds Place	Tens Place	Ones Place

3. Demonstrate the relationship between numerical values by using the symbols $<$, $>$, and $=$. **Example:** It is 120 miles from Lubbock to Amarillo. It is 140 miles from Lubbock to Odessa. Which city is closer to Lubbock: a) $120 < 140$ b) $140 < 120$
4. Describe strategies and explain solutions orally and in writing in a variety of real-life situations. **Example:** Billy makes 95 cents a week helping his grandmother. How much will he make in three weeks? Explain.

5. Demonstrate an understanding of multiplication through using repeated addition, sets, and other strategies. **Example:** Spiders have 8 legs. How many legs are on 2 spiders? How many legs are on 4 spiders? How many legs are on 12 spiders?

6. Explore what it means to divide using models for repeated subtraction, partitioning, and inverse of multiplication. **Example:** Suppose you share 12 cookies with 2 friends. How many cookies would each person get? Explain. Suppose 5 people want to share 12 cookies. Tell how you would do it. Is sharing 12 cookies with 3 friends the same as sharing 12 cookies among 4 people? Explain.

7. Describe what fractions mean in real-life situations by comparing fractions using models, demonstrating equivalent fractions using models, and writing and understanding the symbolic form of fractions. **Example:** Fold a sheet of paper in half. How many sections do you have when you unfold it? How many sections do you think you will have if you fold the paper in half, then in half again? And in half a third time? Fold the paper to check your predictions. Will the number of sections be the same with paper of any size and shape?

Performance Skill: Measurement

Measurement provides a way to answer questions about "how many," "how much," and "how few." (ISBE)

Students are expected to:

1. Solve problems using measurements of perimeter, area, surface area, volume, capacity and weight, using both non-standard and standard units (metric and English). **Example:** Write two things that you would measure using inches, two things you would measure using feet, and two things you would measure using yards.

2. Tell time to the minute using analog and digital clocks; use fractions of the hour; understand when to use AM and PM; calculate elapsed time; explore passage of time; and measure time using the calendar. **Example:** Jeff wants to visit his grandmother after his Little League game on Saturday. If his game ends at 11:35 and it takes 25 minutes to travel to his grandmother's house, what time will Jeff begin his visit? Show how you solved the problem.

3. Know the value of money; count money; make change; count back; use \$, and decimal points appropriately; and solve money problems using addition, subtraction, simple multiplication and division. **Example:** Shelby has \$5.00 in her piggy bank. Her piggy bank only has coins inside. What coins might Shelby have that add up to \$5.00? Give at least 2 examples.

4. Read and interpret temperature using Fahrenheit and Celsius thermometers.

Performance Skill: Patterns & Algebra

Children's observations and discussion of how things change will encourage the development of algebraic thinking. (NCTM)

Students are expected to:

1. Extend, create, and correct patterns; explain and describe rules for patterning; and represent patterns in a variety of ways. **Example:** 1, 2, 4, 7, 11, . . . Explain and describe the rule for this pattern. Starting with 5, what would the next 4 numbers be using this same pattern?
2. Find missing values, using the information given in an equation. **Example:** Using the numerals 0-9, complete the following equations: