

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	1) Trading Stickers, Combining Coins	5

## Targeted Illinois Learning Standards Expectation: Practice

Geometry (3.G)

- 3.G.1b: I can compare and contrast different quadrilaterals. (Supporting)

Number and Operations in Base 10 (3.NBT)

- 3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)
- 3.NBT.2b: I can verify my answer using the inverse operation. (Additional)

Operations and Algebraic Thinking (3.OA)

- 3.OA.9a: I can apply various mathematic patterns (any number multiplied by an even number will result in an even product) to find sums and products. (Major)
- 3.OA.9b: I can explain the property of operations used when finding my product/sum. (Major)
- 3.OA.9c: I can identify patterns using property of operations. (Major)

## Targeted Illinois Learning Standards Expectation: Mastery

Operations and Algebraic Thinking (3.OA)

- 3.OA.8a: Within a story problem, I can determine the value of a variable. (Major)
- 3.OA.8b: I can solve two-step word problems using the four operations. (Major)
- 3.OA.8c: I can justify my answer by using mental math, estimating, and rounding. (Major)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	2) Surveys and Line Plots	4

## Targeted Illinois Learning Standards Expectation: Practice

### Measurement and Data (3.MD)

- 3.MD.3a: I can create a scaled picture graph and bar graph to represent data for several categories. (Supporting)
- 3.MD.3b: I can solve a one-step word problem using data shown in the graph. (Supporting)
- 3.MD.3c: I can solve a two-step word problem using data shown in the graph. (Supporting)
- 3.MD.4a: I can convert measurement data into a line plot. (Supporting)
- 3.MD.4a: I can measure to the nearest half and fourth of an inch. (Supporting)
- 3.MD.4b: I can define horizontal axis and vertical axis on a graph. (Supporting)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	3) Collections and Travel Stories	4

## Targeted Illinois Learning Standards Expectation: Practice

### Measurement and Data (3.MD)

- **3.MD.1b:** I can construct a number line to solve time interval word problems. (Major)
- 3.MD.3a: I can create a scaled picture graph and bar graph to represent data for several categories. (Supporting)
- 3.MD.3b: I can solve a one-step word problem using data shown in the graph. (Supporting)
- 3.MD.3c: I can solve a two-step word problem using data shown in the graph. (Supporting)

### Number and Operations in Base 10 (3.NBT)

- 3.NBT.1: I can round to the nearest 10 and/or 100. (Additional)
- 3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)
- 3.NBT.2b: I can verify my answer using the inverse operation. (Additional)

### Operations and Algebraic Thinking (3.OA)

- 3.OA.3a: I can define symbol, array, and measurement quantities, inverse, dividend, and variable. (Major)
- 3.OA.3b: I can restate the inverse operation for the multiplication or division equation given. (Major)
- 3.OA.8a: Within a story problem, I can determine the value of a variable. (Major)
- 3.OA.8b: I can solve two-step word problems using the four operations. (Major)
- 3.OA.8c: I can justify my answer by using mental math, estimating, and rounding. (Major)
- 3.OA.9a: I can apply various mathematic patterns (any number multiplied by an even number will result in an even product) to find sums and products. (Major)
- 3.OA.9b: I can explain the property of operations used when finding my product/sum. (Major)
- 3.OA.9c: I can identify patterns using property of operations. (Major)

## Targeted Illinois Learning Standards Expectation: Mastery

### Measurement and Data (3.MD)

- 3.MD.7a: I can find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. (Major)
- 3.MD.7b: I can multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. (Major)
- 3.MD.7c: I can use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths  $a$  and  $b + c$  is the sum of  $a \times b$  and  $a \times c$ ; and use area models to represent the distributive property in mathematical reasoning. (Major)
- 3.MD.7d: I can recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (Major)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	4) Perimeter, Angles, and Area	5

## Targeted Illinois Learning Standards Expectation: Practice

### Geometry (3.G)

- 3.G.1a: I can categorize geometric shapes with shared attributes. (Supporting)
- 3.G.1b: I can compare and contrast different quadrilaterals. (Supporting)
- 3.G.1c: I can construct examples to support the classification of quadrilaterals (Supporting)

### Measurement and Data (3.MD)

- **3.MD.5a: I can define a square with side length 1 unit as “a unit square” that is can be used to measure area. (Major)**
- **3.MD.5b: I can calculate the surface of a plane figure by counting the square units. (Major)**
- **3.MD.5c: I can relate the term area is used in measuring a plane figure. (Major)**
- 3.MD.8a: I can define perimeter. (Additional)
- 3.MD.8b: I can determine the perimeter of polygons with given side lengths, to find an unknown length. (Additional)

### Number and Operations in Base 10 (3.NBT)

- 3.NBT.1: I can round to the nearest 10 and/or 100. (Additional)
- 3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)
- 3.NBT.2b: I can verify my answer using the inverse operation. (Additional)

## Targeted Illinois Learning Standards Expectation: Mastery

### Measurement and Data (3.MD)

- **3.MD.6: I can measure the area of a plane figure with any other given units. (Major)**
- **3.MD.7a: I can find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. (Major)**
- **3.MD.7b: I can multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. (Major)**
- **3.MD.7c: I can use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths  $a$  and  $b + c$  is the sum of  $a \times b$  and  $a \times c$ ; and use area models to represent the distributive property in mathematical reasoning. (Major)**
- **3.MD.7d: I can recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (Major)**

### Operations and Algebraic Thinking (3.OA)

- **3.OA.9a: I can apply various mathematic patterns (any number multiplied by an even number will result in an even product) to find sums and products. (Major)**
- **3.OA.9b: I can explain the property of operations used when finding my product/sum. (Major)**
- **3.OA.9c: I can identify patterns using property of operations. (Major)**

## Targeted Illinois Learning Standards Expectation: Review

### Operations and Algebraic Thinking (3.OA)

- **3.OA.8a: Within a story problem, I can determine the value of a variable. (Major)**
- **3.OA.8b: I can solve two-step word problems using the four operations. (Major)**
- **3.OA.8c: I can justify my answer by using mental math, estimating, and rounding. (Major)**

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	5) Equal Groups	7

## Targeted Illinois Learning Standards Expectation: Practice

### Measurement and Data (3.MD)

- **3.MD.1a:** I can tell and write time to the nearest minute. (Major)
- **3.MD.1b:** I can construct a number line to solve time interval word problems. (Major)

### Number and Operations in Base 10 (3.NBT)

- *3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)*
- *3.NBT.2b: I can verify my answer using the inverse operation. (Additional)*
- *3.NBT.3: I can multiply one-digit numbers by multiples of 10 in the range of 10-90 using Base 10 frames and manipulatives. Ex:  $9 \times 80$  can be broken down into  $9 \times 8 = 72$ , then  $72 \times 10 = 720$ . Or  $8 \times 10 = 80$ , then  $80 \times 9 = 720$ . (Distributive property) (Additional)*

### Operations and Algebraic Thinking (3.OA)

- **3.OA.3a:** I can define symbol, array, and measurement quantities, inverse, dividend, and variable. (Major)
- **3.OA.3b:** I can restate the inverse operation for the multiplication or division equation given. (Major)
- **3.OA.5a:** I can define and utilize associative property to solve multiplication and division problems. (Major)
- **3.OA.5b:** I can define and utilize commutative property to solve multiplication and division problems. (Major)
- **3.OA.5c:** I can define and utilize distributive property to solve multiplication and division problems. (Major)
- **3.OA.5d:** I can formulate a numeric equation to represent each property of multiplication. (Major)
- **3.OA.7a:** I can apply repeated subtraction to model division. (Major)
- **3.OA.7b:** I can convert multiplication facts to division and division facts to multiplication. (Major)
- **3.OA.7c:** I can create arrays, area models, and number lines to model multiplication and division. (Major)
- **3.OA.7d:** I can recall multiplication and division facts within 100. (Major)

## Targeted Illinois Learning Standards Expectation: Mastery

### Measurement and Data (3.MD)

- **3.MD.7a:** I can find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. (Major)
- **3.MD.7b:** I can multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. (Major)
- **3.MD.7c:** I can use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths  $a$  and  $b + c$  is the sum of  $a \times b$  and  $a \times c$ ; and use area models to represent the distributive property in mathematical reasoning. (Major)
- **3.MD.7d:** I can recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (Major)

### Operations and Algebraic Thinking (3.OA)

- **3.OA.1a:** I can define products, whole numbers, and interpret. (Major)
- **3.OA.1b:** I can illustrate  $5 \times 7$  with a picture. (Major)
- **3.OA.1c:** I can interpret  $5 \times 7$  in a word problem. (Major)
- **3.OA.4:** I can determine the value of the missing variable in a numeric multiplication or division problem. (Major)
- **3.OA.6a:** I can define factor. (Major)
- **3.OA.6b:** I can select appropriate fact families to solve for a division problem. (Major)
- **3.OA.9a:** I can apply various mathematic patterns (any number multiplied by an even number will result in an even product) to find sums and products. (Major)
- **3.OA.9b:** I can explain the property of operations used when finding my product/sum. (Major)
- **3.OA.9c:** I can identify patterns using property of operations. (Major)

## Targeted Illinois Learning Standards Expectation: Review

### Operations and Algebraic Thinking (3.OA)

- **3.OA.8a:** Within a story problem, I can determine the value of a variable. (Major)
- **3.OA.8b:** I can solve two-step word problems using the four operations. (Major)
- **3.OA.8c:** I can justify my answer by using mental math, estimating, and rounding. (Major)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	6) Stories, Tables, and Graphs	3

## Targeted Illinois Learning Standards Expectation: Practice

Number and Operations in Base 10 (3.NBT)

- 3.NBT.1: I can round to the nearest 10 and/or 100. (Additional)
- 3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)
- 3.NBT.2b: I can verify my answer using the inverse operation. (Additional)

Operations and Algebraic Thinking (3.OA)

- 3.OA.3a: I can define symbol, array, and measurement quantities, inverse, dividend, and variable. (Major)
- 3.OA.3b: I can restate the inverse operation for the multiplication or division equation given. (Major)
- 3.OA.7a: I can apply repeated subtraction to model division. (Major)
- 3.OA.7b: I can convert multiplication facts to division and division facts to multiplication. (Major)
- 3.OA.7c: I can create arrays, area models, and number lines to model multiplication and division. (Major)
- 3.OA.7d: I can recall multiplication and division facts within 100. (Major)
- 3.OA.8a: Within a story problem, I can determine the value of a variable. (Major)
- 3.OA.8b: I can solve two-step word problems using the four operations. (Major)
- 3.OA.8c: I can justify my answer by using mental math, estimating, and rounding. (Major)

## Targeted Illinois Learning Standards Expectation: Mastery

Operations and Algebraic Thinking (3.OA)

- 3.OA.9a: I can apply various mathematic patterns (any number multiplied by an even number will result in an even product) to find sums and products. (Major)
- 3.OA.9b: I can explain the property of operations used when finding my product/sum. (Major)
- 3.OA.9c: I can identify patterns using property of operations. (Major)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	7) Finding Fair Shares	2

## Targeted Illinois Learning Standards Expectation: Practice

### Geometry (3.G)

- 3.G.2a: I can decompose shapes into equal parts. (Supporting)
- 3.G.2b: I can identify each as a fractional part. (Supporting)

### Measurement and Data (3.MD)

- **3.MD.1a: I can tell and write time to the nearest minute. (Major)**

### Number and Operations in Base 10 (3.NBT)

- 3.NBT.1: I can round to the nearest 10 and/or 100. (Additional)
- 3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)
- 3.NBT.2b: I can verify my answer using the inverse operation. (Additional)

### Operations and Algebraic Thinking (3.OA)

- **3.OA.3a: I can define symbol, array, and measurement quantities, inverse, dividend, and variable. (Major)**
- **3.OA.3b: I can restate the inverse operation for the multiplication or division equation given. (Major)**

## Targeted Illinois Learning Standards Expectation: Mastery

### Measurement and Data (3.MD)

- **3.MD.1b: I can construct a number line to solve time interval word problems. (Major)**

### Number and Operations- Fractions (3.NF)

- **3.NF.1: I can multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g.,  $9 \times 80$ ,  $5 \times 60$ ) using strategies based on place value and properties of operations. (Major)**
- **3.NF.2a: I can identify a fraction on a number line by using 0 to 1 as the whole and breaking it into equal parts. Ex: . can be shown as 1 broken into 4 equal parts. (Major)**
- **3.NF.2b: I can label a fraction as an equal part on the number line. (Major)**
- **3.NF.3a: I can understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. (Major)**
- **3.NF.3b: I can recognize and generate simple equivalent fractions, e.g.,  $1/2 = 2/4$ ,  $4/6 = 2/3$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model. (Major)**
- **3.NF.3c: I can Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form  $3 = 3/1$ ; recognize that  $6/1 = 6$ ; locate  $4/4$  and 1 at the same point of a number line diagram. (Major)**
- **3.NF.3d: I can compare two fractions with the same numerator or the same denominator by reasoning about their size; recognize that comparisons are valid only when the two fractions refer to the same whole; and record the results of comparisons with the symbols  $>$ ,  $=$ , or  $<$ , and justify the conclusions, e.g., by using a visual model. (Major)**

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	8) How Many Hundreds? How Many Miles?	4

## Targeted Illinois Learning Standards Expectation: Practice

Number and Operations in Base 10 (3.NBT)

- 3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)
- 3.NBT.2b: I can verify my answer using the inverse operation. (Additional)

## Targeted Illinois Learning Standards Expectation: Mastery

Operations and Algebraic Thinking (3.OA)

- 3.OA.3a: I can define symbol, array, and measurement quantities, inverse, dividend, and variable. (Major)
- 3.OA.3b: I can restate the inverse operation for the multiplication or division equation given. (Major)
- 3.OA.7a: I can apply repeated subtraction to model division. (Major)
- 3.OA.7b: I can convert multiplication facts to division and division facts to multiplication. (Major)
- 3.OA.7c: I can create arrays, area models, and number lines to model multiplication and division. (Major)
- 3.OA.7d: I can recall multiplication and division facts within 100. (Major)
- 3.OA.8a: Within a story problem, I can determine the value of a variable. (Major)
- 3.OA.8b: I can solve two-step word problems using the four operations. (Major)
- 3.OA.8c: I can justify my answer by using mental math, estimating, and rounding. (Major)
- 3.OA.9a: I can apply various mathematic patterns (any number multiplied by an even number will result in an even product) to find sums and products. (Major)
- 3.OA.9b: I can explain the property of operations used when finding my product/sum. (Major)
- 3.OA.9c: I can identify patterns using property of operations. (Major)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	9) Solids and Boxes	2

## Targeted Illinois Learning Standards Expectation: Practice

Measurement and Data (3.MD)

- **3.MD.2a:** I can define volume and mass. (Major)
- **3.MD.2b:** I can estimate and measure the capacity/weight of objects using Metric units (grams, kilograms, liters). (Major)

Number and Operations in Base 10 (3.NBT)

- *3.NBT.1: I can round to the nearest 10 and/or 100. (Additional)*
- *3.NBT.2a: I can add up to four digit numbers within 1000 using strategies of place value and properties of operations. (Additional)*
- *3.NBT.2b: I can verify my answer using the inverse operation. (Additional)*

## Targeted Illinois Learning Standards Expectation: Mastery

Operations and Algebraic Thinking (3.OA)

- **3.OA.8a:** Within a story problem, I can determine the value of a variable. (Major)
- **3.OA.8b:** I can solve two-step word problems using the four operations. (Major)
- **3.OA.8c:** I can justify my answer by using mental math, estimating, and rounding. (Major)

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	11) #Quarter 1	9

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	12) #Quarter 2	9

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	13) #Quarter 3	10

# Rantoul City Schools District #137 Unit Plan

Subject	Unit Plan Name	Unit	Length (Weeks)
Grade 3	Math Investigations Gr 3	14) #Quarter 4	8