

Subject	Grade	Strand	Big Idea	
Math	2		Rationale, Course Description, Most Important Learner Outcomes, and Evaluation	View
Math	2	Number and Operations	Number and Operations 1A	View
Math	2	Number and Operations	Number and Operations 1B	View
Math	2	Number and Operations	Number and Operations 1C	View
Math	2	Number and Operations	Number and Operations 1D	View
Math	2	Number and Operations	Number and Operations 2A	View
Math	2	Number and Operations	Number and Operations 3A, 3B, 3C	View
Math	2	Algebraic Relationships	Algebraic Relationships 1A, 1B	View
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Math	2	Algebraic Relationships	Algebraic Relationships 2A, 2B, 3A	View
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Math	2	Geometric and Spatial Relationships	Geometric and Spatial Relationships 1A	View
Math	2	Geometric and Spatial Relationships	Geometric and Spatial Relationships 2A	View
Math	2	Geometric and Spatial Relationships	Geometric and Spatial Relationships 3A, 3C	View
Math	2	Geometric and Spatial Relationships	Geometric and Spatial Relationships 4A	View
Math	2	Measurement	Measurement 1A, 2A	View
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Math	2	Measurement	Measurement 1D	View
Math	2	Data and Probability	Data and Probability 1A, 1B, 1C	View

RATIONALE

The basis for a good mathematical environment involves hands on activities to stimulate high interests in solving mathematical problems and developing abilities to relate these skills for use in everyday life.

COURSE DESCRIPTION

The second grade math curriculum builds a strong foundation and understanding of basic mathematical concepts. The curriculum focuses on critical thinking skills, organization, mathematical accuracy, communication skills, and responsibility. Students will use problem-solving strategies; develop number sense; use graphs in a real world context; apply measurement, geometry, and statistical concepts, and learn basic facts. Students will learn through hands on activities, exploration of real world situations, and technology. A major goal of second grade is to develop life-long learners who love math and can use math in their daily lives.

MOST IMPORTANT LEARNER OUTCOMES

Students will be able to:

1. Read, write, and compare numbers, and identify place value to 999.
2. Read and write fractions $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$.
3. Use a variety of strategies to solve addition and subtraction problems.
4. Create and complete patterns.
5. Construct, read, and interpret displays of data.
6. Describe, model, draw, and classify 2 and 3 dimensional shapes.
7. Select the appropriate unit and tool to measure size, weight, and temperature.
8. Identify the value of a set of coins to \$1.00 and to tell time.

EVALUATION

Second grade students are evaluated by teacher observation, portfolios, teacher made test, district adopted testing materials, written and oral testing designed for individual learning styles.

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Number Sense and Numeration	Duration: On going
Show-Me Standards Content: MA 1. 6 Show-Me Standards Process: 1.10	
Grade Level Expectations: Number and Operations 1A	
Benchmarks: Understand numbers, ways of representing numbers, relationships among numbers, and number systems.	Performance Indicators(Local Objective): Students will be able to: 1. read, write, and compare whole numbers less than 100
Activities and Assessments:	
<ol style="list-style-type: none"> 1. Use a hundred chart to have students guess covered numbers, guess number above, below, left and right of a number. 2. Have students fill-in numbers on a hundred chart. 3. Orally say numbers have students write them. 4. Use color tiles to compare numbers. 5. Count large collections by grouping by 10's and 100's. 6. Draw pictures to represent large numbers. 7. Use base ten blocks to show three digit numbers. 8. Use base ten blocks to write a three digit number for a model. 9. Have students find books in the classroom and LMC that have more than 100 pages, 200 pages 500 pages etc. 10. Identify missing number in a sequence 11. Use "Allie the Alligator" for comparing numbers <p>Assessment: Teacher observation, Written assessment</p>	
Resources:	
<p>Number cards</p> <p>Base ten blocks</p> <p>Allie the Alligator picture & story</p> <p>Relevant Links:</p>	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Fractions and Decimals	Duration: On going
Show-Me Standards Content: MA 1 Show-Me Standards Process: 1.10	
Grade Level Expectations: Numbers and Operations 1B	
Benchmarks: Understand numbers, ways of representing numbers, relationships among numbers and number systems	Performance Indicators(Local Objective): Students will be able to: 1. Recognize $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ of shape
Activities and Assessments: <ol style="list-style-type: none"> 1. Use pattern blocks to determine which pattern block it takes to cover $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{6}$ of the hexagon. 2. Use construction paper shapes to show halves. 3. Show how some shapes can be divided more than one way to make halves. 4. Use 8" construction paper circles to divide into halves, fourths and eighths. 5. Divide an apple into halves, fourths and eighths. 6. Play fraction games online. 7. Use candies or color tiles to show how to write fractions that shows a part of a set or group. 8. Group students in groups of 2, 3, or 4. Give each group a Hershey's candy bar have them divide the candy bar equally between each child in group. Have students determine what fraction of the candy bar they got. <p>Assessment: Written assessments, Teacher observation</p>	
Resources: Color tiles or candies Online computer games Apples or other kinds of food Relevant Links:	

Phelps County R-3 School

Board Approved Date:
Modification Date:

Subject: Math

Class Name: 2nd

Unit: Number Sense and Numeration

Duration: On going

Show-Me Standards Content: MA 1
Show-Me Standards Process: 3.2, 3.3

Grade Level Expectations: Number and Operations 1C

Benchmarks:

Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Performance Indicators(Local Objective):

Students will be able to:

1. Compose or decompose numbers by using a variety of strategies, such as using known facts, tens or landmark numbers to solve problems

Activities and Assessments:

1. Daily morning meeting – Students come up with different ways to get to a number (ie. $4+6=10$, $5+5=10$, $20-10=10$)
2. Use different coins to get the same value.
3. Have students find an object in a toy catalog that they want to purchase then have them find different way they could pay for the item. (\$10.00- 2 fives, 1 five and 5 ones, 40 quarters)
4. Rocket Math
5. When adding several one digit numbers together, put some numbers together to represent 10 (ie. $4+8+6+5+2+5=$ add $4+6=10$, $8+2=10$, $5+5=10$, then and the 10's to get answer)
5. Counting by 2's, 5's, 10's

Assessment: Teacher observation, Student Work, Written assessment

Resources:

Rocket Math Worksheets

Teacher's Helper

Relevant Links:

www.superteacherworksheets.com

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Number Sense and Numeration	Duration: On going
Show-Me Standards Content: MA 1 Show-Me Standards Process: 1.10	
Grade Level Expectations: Numbers and Operations 1D	
Benchmarks: Understand numbers, ways of representing Numbers, relationships among numbers, and number systems	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Skip count by 2's, 5's, and 10's
Activities and Assessments: <ol style="list-style-type: none"> 1. Daily morning meeting oral skip counting. 2. Use dimes to count by 10's, nickels to count by 5's, and quarters to count by 25's, counting money 3. Use clock to count by 5's, telling time. 4. Use counting strips. 5. Fill-in 2's, 5's, and 10's number patterns. <p>Assessment: Written assessments, Teacher observation, Student work</p>	
Resources: Teacher's Helper Relevant Links: www.superteacherworksheets.com	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Number sense and Operation	Duration: On going
Show-Me Standards Content: MA 1	
Show-Me Standards Process: 1.6, 1.10	
Grade Level Expectations: Number and Operations 2A	
Benchmarks: Understand meanings of operations And how they relate to one another	Performance Indicators(Local Objective): Students will be able to: 1. Represent a given situation involving addition or subtraction
Activities and Assessments:	
<ol style="list-style-type: none"> 1. Have students act out some, some more stories. 2. Have students act out some, some went away stories. 3. Have students draw pictures that represent some and some more stories. 4. Have students draw pictures that represent some, some went away stories. 5. Have students write number sentences for some, some more stories. 6. Have students write number sentences for some, some went away stories. 7. Have students write fact families. <p>Assessment: Teacher observation, Student work , Written assessments</p>	
Resources:	
<i>Relevant Links:</i>	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Number sense and Operation	Duration: On going
Show-Me Standards Content: MA 1. 5 Show-Me Standards Process: 1.6, 1.10, 3.4, 4.1	
Grade Level Expectations: Number and Operations 3A, 3B, 3C	
Benchmarks: Compute fluently and make reasonable estimates	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Describe or notate the mental strategy used to compute addition or subtraction of whole numbers, including 2-digit numbers 2. Demonstrate fluency with basic number relationships of addition and subtraction for sums up to 20 3. Apply and describe the strategy used to compute 2-digit addition or subtraction problems
Activities and Assessments: <ol style="list-style-type: none"> 1. Students use mental math to add to 10 to a multiple of 10 2. Students will use a number chart to check adding 10 to a number 3. Compute addition and subtraction problems mentally during the daily morning meeting, (ie. start with a number, 73, say add 10, add 1, subtract 10, subtract 1, add 10 What do we need to do to get back to 73?) 4. Write a 2-digit number on the board ask a student to tell another 2-digit number. Ask the students if they think the sum of the numbers will be over 100, have them justify their answer. 5. Write several 2-digit numbers on the board ask the student to pick 2 of the numbers they think will have a sum greater than 100. 6. Use a classroom store to estimate a sum- tell students they have a certain amount to spend they need to estimate what items they can buy. 7. Have students add 3 digit numbers by estimating pennies. (ie. 168 pennies and 225 pennies, How many pennies do they have altogether, have them check their estimates) 8. Have students explain to their partner each step in the addition and subtraction process for 2 and 3 digit numbers with carrying and borrowing. 9. Students will demonstrate fluency of addition and subtraction by taking weekly timed facts test, and daily practice. <p>Assessment: Teacher observation, Student work , Rocket Math, Written Assessment</p>	

Resources:

Rocket Math worksheets

Relevant Links:

<http://www.oswego.org/ocsd-web/games/Mathmagician/cathymath.html>

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Algebraic Relationships	Duration: On going
Show-Me Standards Content: MA 4 Show-Me Standards Process:1.6, 3.5	
Grade Level Expectations: Algebraic Relationships 1A, 1B	
Benchmarks: Understand patterns, relations and functions	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Describe and extend simple numeric patterns and change from one representation to another 2. Describe how simple growing patterns are generated
Activities and Assessments: <ol style="list-style-type: none"> 1. Create and read repeating patterns using pattern block, identify pattern (ie: ABBC) 2. Complete a growing pattern by describing how it was generated. 3. Create a class pattern by having students create and add to patterns of classmates. 4. Create a color pattern-have students write the letters of their first name in each box of a grid, until the grid is completed. Then color each letter of their name a different color. Describe how the pattern was formed. 5. Fill in missing number patterns, identify the rule used to find the missing numbers. <p>Assessment: Teacher observation, Student work , Written assessment</p>	
Resources: <p>Teacher's Helper</p> <p>Pattern Blocks</p> <p>Relevant Links:</p> <p>http://nlvm.usu.edu/en/nav/vlibrary.html</p>	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Algebraic Relationships	Duration: On going
Show-Me Standards Content: MA 2, 8 Show-Me Standards Process: 1.8	
Grade Level Expectations: Algebraic Relationships 1C	
Benchmarks: Understand patterns, relations, and functions	Performance Indicators(Local Objective) Students will be able to: 1. Classify objects by size, number or other attributes
<p style="text-align: center;">Activities and Assessments:</p> <ol style="list-style-type: none"> 1. Classify pattern blocks by size, shape, and color 2. Classify classmates (ie: boy, girl, hair color, eye color, height) 3. Give students bags full of different shapes have them come up with different was to classify the shapes 4. Classify numbers (ie: odd, even, multiples) <p>Assessment: Teacher observation, Student work, Written assessment</p>	
<p style="text-align: center;">Resources:</p> <p>Pattern blocks</p> <p>Relevant Links: http://www.abc.net.au/countusin/default.htm</p>	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Algebraic Relationships	Duration: On going
Show-Me Standards Content: MA 1, 4, 5 Show-Me Standards Process: 1.6, 3.1, 3.6	
Grade Level Expectations: Algebraic Relationships 2A, 2B; 3A	
Benchmarks: Represent and analyze mathematical situations and structures using algebraic symbols Use mathematical models to represent and Understand quantitative relationships	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Represent a mathematical situation as an expression or number sentence 2. Investigate commutative principle with whole numbers 3. Model situations that involve addition and subtraction of whole numbers, using pictures, objects or symbols
<p style="text-align: center;">Activities and Assessments:</p> <ol style="list-style-type: none"> 1. Have students write $0+1=1$, $0+2=2$, $0+3=3$ etc. Then have them write $1+0=1$, $2+0=2$, $3+0=3$ etc. explain that this show commutative property of addition. 2. Have students practice writing and solving addition problems 3. Draw some, some more pictures, and some, some went away pictures to represent an addition or subtraction problem. 4. Write number sentences for some, some more and some, some went away . 5. Write real life stories for some, some more and some, some went away. 6. Daily class practice give students different situations to write number to represent the problem. 7. Use manipulatives to model addition and subtraction 8. Write addition and subtraction fact families. 9. Use color tiles to compare numbers, then write an expression using $<$, $>$, or $=$. 	
<p>Assessment: Teacher observation, Student Work, Written assessment</p>	
<p style="text-align: center;">Resources:</p>	
<p>Color tiles</p>	
<p>Relevant Links:</p>	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Algebraic Relationships	Duration: On going
Show-Me Standards Content: MA 4 Show-Me Standards Process:4.1	
Grade Level Expectations: Algebraic Relationships 4A	
Benchmarks: Analyze change in various contexts	Performance Indicators(Local Objective): Students will be able to: 1. Describe qualitative change, such as student's growing taller
Activities and Assessments:	
<ol style="list-style-type: none"> 1. At the beginning of the year measure the height of each student. Measure again half-way through the school year, then again at the end of the year. Have students describe what change took place in their height over the school year. 2. Have students bring in stuffed toys, have them arrange the toys from tallest to shortest, biggest to smallest. 3. Keep daily graph of temperature, ask students "Is today warmer or colder than yesterday?" Have them describe the change in temperature. 	
Assessment: Teacher observation	
Resources:	
Relevant Links:	

Phelps County R-3 School

Board Approved Date:
Modification Date:

Subject: Math

Class Name: 2nd

Unit: Algebraic Relationships

Duration: On going

Show-Me Standards Content: MA 4

Show-Me Standards Process:4.1

Grade Level Expectations: Algebraic Relationships 4A

Benchmarks:

Analyze change in various contexts

Performance Indicators(Local Objective):

Students will be able to:

1. Describe qualitative change, such as student's growing taller

Activities and Assessments:

1. At the beginning of the year measure the height of each student. Measure again half-way through the school year, then again at the end of the year. Have students describe what change took place in their height over the school year.
2. Have students bring in stuffed toys, have them arrange the toys from tallest to shortest, biggest to smallest.
3. Keep daily graph of temperature, ask students "Is today warmer or colder than yesterday?" Have them describe the change in temperature.

Assessment: Teacher observation

Resources:

Relevant Links:

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Geometric and Spatial Relationships	Duration: On going
Show-Me Standards Content: MA2 Show-Me Standards Process: 3.3, 4.1	
Grade Level Expectations: Geometric and Spatial Relationships 2A	
Benchmarks: Specify locations and describe spatial relationships using coordinate geometry and other representational systems.	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Find and name locations with simple relationships on a map (coordinate system)
Activities and Assessments: <ol style="list-style-type: none"> 1. Show students what a coordinate graph looks like. Explain that each of the points has a special address that tells where it is located on the graph. Discuss and answer questions. 2. Students will locate points on a graph, and name the “address” for places located on the graph. 3. Students will read ordered pairs and locate and connect the coordinates on quadrant graphs to create recognizable pictures. 4. Students will read ordered pairs to place animals in the correct location at the zoo. 5. Have students design their own graph. 6. Have student design their own map of the classroom, school, or play ground. <p>Assessment: Teacher observation, Student work, Written Assessment</p>	
Resources: <p>Teacher’s Helper</p> <p>Marshall, Katherine, <u>Plotting Points Grade 2-4</u>, Instructional Fair, Copyright 2000</p> <p>Relevant Links:</p>	

Phelps County R-3 School

Board Approved Date:

Modification Date:

Subject: Math

Class Name: 2nd

Unit: Geometric and Spatial Relationships

Duration: On going

Show-Me Standards Content: MA 2

Show-Me Standards Process: 1.4, 1.10

Grade Level Expectations: Geometric and Spatial Relationships 3A, 3C

Benchmarks:

Apply transformations and use symmetry to

Analyze mathematical situations

Performance Indicators (Local Objective):

Students will be able to:

1. Use manipulatives to model flips
2. Recognize and create shapes that have symmetry

Activities and Assessments:

1. Use online demonstrations to model flips, turns, and slides.
2. Have students use different manipulatives to model slide, turn, and flip.
3. Use a student to demonstrate symmetry. Pretend to draw a line down the middle of the child. Ask, What is the same on each side of the "line"?
4. Show the students a circle, square, triangle, and heart. Have volunteers draw lines of symmetry on the shapes.
5. Fold a piece of construction paper down the middle put a spoonful of paint on one side of the fold. Fold the paper and push the paint to the edge, open the paper. Have students recognize the line of symmetry and the symmetrical design the paint made. Have students make their own.
6. Have students use resources to find symmetry in nature.

Assessment: Teacher observation, Student work , Written assessment

Resources:

Teacher's Helper

Relevant Links:

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Algebraic Relationships	Duration: On going
Show-Me Standards Content: MA 2 Show-Me Standards Process: 3.6	
Grade Level Expectations: Algebraic Relationships 4A	
Benchmarks: Analyze change in various contexts	Performance Indicators(Local Objective): Students will be able to: 1. Describe qualitative change, such as student’s growing taller
Activities and Assessments:	
<ol style="list-style-type: none"> 1. At the beginning of the year measure the height of each student. Measure again half-way through the school year, then again at the end of the year. Have students describe what change took place in their height over the school year. 2. Have students bring in stuffed toys, have them arrange the toys from tallest to shortest, biggest to smallest. 3. Keep daily graph of temperature, ask students “Is today warmer or colder than yesterday?” Have them describe the change in temperature. 	
Assessment: Teacher observation	
Resources:	
Relevant Links:	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Measurement	Duration: On going
Show-Me Standards Content: MA 2 Show-Me Standards Process: 1.4, 3.3, 3.7	
Grade Level Expectations: Measurement 1A, 2A	
<p>Benchmarks:</p> <p>Understand measurable attributes of objects and the units, systems and processes of measurement.</p> <p>Apply the appropriate techniques, tools and formulas to determine measurements</p>	<p>Performance Indicators(Local Objective):</p> <p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Select an appropriate unit and tool for the attribute being measured. 2. Use tools to measure (size, temperature, time, weight) to the nearest inch, centimeter, degree, hour and pound
<p>Activities and Assessments:</p> <ol style="list-style-type: none"> 1. Ask students to select what tool or unit of measurement they would use to find the length of their text books, the length of a car, height of a door, the length of a pencil, the distance from the school to their house. 2. Have students select what tool or unit of measurement they would use to measure a liquid, weight of an object, how much flour to put in a recipe, time, and temperature. 3. Students will use a ruler to measure to the nearest inch and centimeter, use a clock to measure time to the nearest hour and minute, use different scales to measure weight to the nearest pound, and use a thermometer to measure temperature to the nearest degree. 4. Have students measure several objects in the classroom to the nearest in and centimeter. 5. Students will measure their heights at the beginning, middle, and end of school. 6. Students will measure a stack of text books to determine if they will fit in their desk. 7. Daily thermometer reading. 8. Daily measuring of date and name lines on math worksheets. 9. Have student estimate the length and weight of objects then use resources from the classroom and LRC to find if their estimates were correct. 10. Online activities in the computer lab. <p>Assessment: Teacher observation, Student work , Written assessment</p>	

Resources:

Rulers

Judy clocks

Thermometers

Measuring cups and spoons

Relevant Links:

http://nlvm.usu.edu/en/nav/topic_t_4.html

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Measurement	Duration: On going
Show-Me Standards Content: MA 2 Show-Me Standards Process: 3.3	
Grade Level Expectations: Measurement 1C	
Benchmarks: Understand measurable attributes of objects and the units, systems and processes of measurement.	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Tell time to the nearest half hour.
<p style="text-align: center;">Activities and Assessments:</p> <ol style="list-style-type: none"> 1. Students will use Judy clocks to demonstrate time. 2. Have students explain how they know the difference between the hour and minute hands on a clock. 3. Students will draw hands on a clock face to show time. 4. Have students tell what time they get up in the morning, eat lunch, and go to bed. Then have them count how many hours between each activity. 5. Online activities in computer lab. <p>Assessment: Teacher observation, Written assessments</p>	
<p style="text-align: center;">Resources:</p> <p>Teacher's Helper</p> <p>Judy clocks</p> <p>Relevant Links:</p> <p>www.superteacherworksheets.com</p> <p>http://nlvm.usu.edu/en/nav/topic_t_4.html</p>	

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Math	Class Name: 2nd
Unit: Measurement	Duration: On going
Show-Me Standards Content: MA 2 Show-Me Standards Process: 3.3	
Grade Level Expectations: Measurement 1D	
Benchmarks: Understand measurable attributes of objects and the units, systems and processes of measurement.	Performance Indicators(Local Objective): Students will be able to: 1. Count money to a dollar
<p style="text-align: center;">Activities and Assessments:</p> <ol style="list-style-type: none"> 1. Have students determine how many pennies, nickels, dimes, and quarters equal a dollar. 2. Put coins in a bag give each student a bag have the count the value of coins in their bag. 3. Give students a bag of coins have them show the value of one dollar as many ways as possible with the coins they have. 4. Set up a “Shop” in the classroom. Let students earn money to spend at the shop (good behavior, homework etc.) Have students calculate if they have enough money to buy what they want or if they need of earn and save more money. 5. Have students use catalogs to determine the price of different objects. <p>Assessment: Teacher observation, Written assessments, Shopping Trip</p>	
<p style="text-align: center;">Resources:</p> Play money Big laminated coins Online computer games Relevant Links:	
Phelps County R-3 School	Board Approved Date: Modification Date:

Subject: Math	Class Name: 2 nd Grade
Unit: Data and Probability	Duration: On going
Show-Me Standards Content: MA 2, 3	
Show-Me Standards Process: 1.2, 1.8	
Grade Level Expectations: Data and Probability 1A, 1B, 1C	
Benchmarks: Formulates questions that can be addressed with data and collect, organize, and display relevant data to answer them	Performance Indicators(Local Objective): Students will be able to: <ol style="list-style-type: none"> 1. Pose questions and gather data about themselves and their surroundings 2. Sort and classify items according to their attributes and organize data about the item 3. Represent data using pictures and bar graphs

Activities and Assessments:

1. Students will write down their birthdates on a 2” square paper, they will then use the data on the squares to represent a class birth day graph. Pose question about the class birthday graph (i.e. How many students have a birthday in May?, How many more students have a birthday in June than July?)
2. Students will make, read, and draw a pictograph of their favorite day of the week (students will write their favorite day of the week on one side of a tag and draw a picture of why it is their favorite day of the week on the other side of the tag. They will use the tags to make a class pictograph, then students will make their own.
3. Students will make a class graph of their favorite apple (red, green, yellow). Have student taste each apple, then have them put a red, green or yellow circle on the graph to represent their choice.
4. Students will make a graph and Venn diagram to represent the number of children in their families. Student will graph number of brothers and number of sisters they have, then use a Venn diagram to represent the number of brothers and sisters together.
5. Students will make a pictograph with a scale of two. Students will gather the number of students from three different classrooms, then they will represent the data on a pictograph. They will draw one happy face for every two students. If a class has an odd number of students they will draw ½ of a happy face.
6. Student will make a class graph of favorite ice cream flavors. Then write observations of the data represented on the graph.
7. Students will conduct a survey and represent the data on a graph. Pair students together and have the come up with a question and four choices for an answer. They will pose the question to other students in the school. They will use tally marks to tally their answers and make a graph to represent their data. They will then write observations about their graphs.

Assessment: Teacher observation, Written assessments

Resources:

Teacher's Helper

Online Venn diagram maker

Relevant Links:

<http://nces.ed.gov/nceskids/>