Subject	Grade	Strand	Big Idea	
Math	1		Rationale, Course Description, Most Important Learner Outcomes, and Evaluation	View
Math	1	Numbers & Operations	1A, 1D - Comparing numbers and skip counting	View
Math	1	Numbers & Operations	1B - Fractions	View
Math	1	Numbers & Operations	2A, 3A, 3B – Addition and Subtraction	View
Math	1	Geometric & Spatial Relationships	1A, 4A – Recognize 2- and 3- dimensional shapes	View
Math	1	Geometric & Spatial Relationships	2A – relative positions and coordinate systems	View
Math	1	Geometric & Spatial Relationships	3A – slides, flips and turns	View
Math	1	Geometric & Spatial Relationships	3C - symmetry	View
Math	1	Algebraic Relationships	1A, 1B - patterns	View
Math	1	Algebraic Relationships	2A, 3A – mathematical situations	View
Math	1	Measurement	1A – measurement tools	View
Math	1	Measurement	1C - time	View
Math	1	Measurement	1D - money	View
Math	1	Measurement	2A – measurement techniques	View
Math	1	Data & Probability	1A, 1B. 1C - graphing	View

RATIONALE

The basis for a good mathematics program involves creating an environment where math is perceived as a way of thinking about the world around us. In this environment, the students uses logic to understand signs, symbols, and terms which will develop their confidence in expressing themselves when solving critical and creative problems.

COURSE DESCRIPTION

The first grade mathematics course utilizes the concepts of geometry, spatial relationships, patterning, numerals, addition, subtraction, measurement, time, money and graphs to develop a foundation for the purposes for which numbers are used.

MOST IMPORTANT LEARNER OUTCOMES

Student will be able to:

1. Understand numbers, ways of representing numbers, relationship among numbers, and number systems.
2. Analyze characteristics and properties of two and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships.
3. Understand measurable attributes of objects and the units, systems, and processes of measurement
4. Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them
5. Understand patterns, relations, and functions

EVALUATION

First grade students are evaluated by teacher observation, student products, duplicated tests from resource material and individual oral testing.

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Number and Operations	**Duration:** Ongoing
Show-Me Standards Content: MA 1, 6, **Show-Me Standards Process:** 1.10	
Grade Level Expectations: 1A, 1A (2nd grade), 1D (2nd grade)	
Benchmarks: Understand numbers, ways of representing numbers, relationships among numbers and number systems.	**Performance Indicators(Local Objective):** 1. Recognize "how many' in a set of objects. 2. Read, write and compare whole numbers less than 100. 3. Skip count by 2's, 5's and 10's.

Activities and Assessments:

1. daily opportunities to count a variety of objects, in all subject areas, will be given
2. guess and check seasonal or theme items found in an estimation jar
3. provide manipulatives for students to represent numbers
4. write numbers to 100; using the 100's grid and eventually plain paper
5. use a hundred's pocket chart to: a) , order numbers to 100 b) place random numbers in order to 100 c) count by 2's, 5's, 10's d) find number patterns
6. provide daily opportunity during calendar time to count by 2's, 5's or 10's to a designated number – using 100's chart and money pocket chart
7. order number cards consecutively and non-consecutively: a)before, after, between b)highest to lowest c) lowest to highest
8. act out real life situations to teach the concept of ordinal numbers – example: who is 1st in line, 2nd, etc.
9. math practice book pages – Chapter's 1-4 & 7
10. compare numbers using symbols <, >, and =
11. place value chart – add a straw each day to represent the number of days of school, regrouping 1's to 10's, and 10's to 100's (calendar time)
12. use manipulatives and place value mats to regroup 1's to 10's and 10's to 1's, (use base 10 blocks, pennies and dimes, students set and overhead) – allow students to investigate items that can be regrouped; example: mini marshmallows to large marshmallows, etc.
13. computer lab - websites listed below can be used for practice

Assessment:

- math practice book pages – assessment for performance indicators #1 & #2 – chapters 1-4 and assessment for performance indicator #3 – Chapter 7
- various reproducible activities available in resource books and Teacher's Helper
- Cotton Ball Weightlifting assessment (attached)
- Flashcard activity – number sense (attached)

Relevant Links:

http://nlvm.usu.edu/en/nav/vlibrary.html - Numbers and Operations section

http://www.abc.net.au/countusin/default.htm - basic number concepts

Resources

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

LMC & computer lab with internet access

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Number and Operations	**Duration:** Ongoing
Show-Me Standards Content: MA 1, **Show-Me Standards Process:** 1.10	
Grade Level Expectations: 1B (2nd grade)	
Benchmarks: Understand numbers, ways of representing numbers, relationships among numbers and number systems	**Performance Indicators (Local Objective):** 1. Recognize ½, 1/3, ¼ of a shape.

Activities and Assessments:

1. listen to the book Eating Fractions. Make a picture of each food, divide it equally or in thirds or fourths and label the fractional part
2. listen to the book titled The Doorbell Rang. Using 12 pieces of Cookie Crisp cereal, the students will act out the story dividing the cookies into equal shares as the story progresses.
3. reinforce fractional concepts using the internet
4. using circles to represent pizzas, the students will divide and label the fractions according to the number of people eating the pizza
5. use fraction flash cards
6. variety of reproducible sheets available to reinforce fractions
7. math practice book pages – chapter 5
8. computer lab – website listed below
9. complete a simple cooking activity using fractions while measuring
10. use overhead tiles to represent a variety of fractions
11. allow students to research items within the classroom that are divided into fractions – example: file cabinet, book shelf, shoes, etc.
12. fraction puzzles, flashcards and fraction tiles

Assessment:

- math practice book pages – chapter 5
- teacher observation
- various reproducible activities available in resource books and Teacher's Helper
- Birthday party cake assessment (attached)

Relevant Links:

http://www.internet4classrooms.com/skills_1st.htm#math - #6 Identify Fractions

http://nlvm.usu.edu/en/nav/vlibrary.html - Numbers and Operations – Fractions

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

LMC & computer lab with internet access

Fraction puzzles, games, tiles, flashcards

Phelps County R-3 School

Board Approved Date:
Modification Date:

Subject:	**Class Name:**
Mathematics	1st grade
Unit: Number and Operations	**Duration:** Ongoing

Show-Me Standards Content: MA1,
Show-Me Standards Process: 1.6, 1.10, 3.4, 4.4

Grade Level Expectations: 2A, 2A (2nd grade), 3A, 3B

Benchmarks:

Understand meanings of operations and how they related to one another.

Compute fluently and make reasonable estimates.

Performance Indicators(Local Objective):

1. Represent a given situation involving addition and subtraction.
2. Describe or represent the mental strategy used to compute an addition problem.
3. Develop fluency with basic number relationships of addition and subtraction for sums up to 20.

Activities and Assessments:

1. use number line and touch points (if needed) to teach the concepts of counting forwards and counting back
2. develop awareness of beginning with the largest number and counting from this point
3. participate in flash card games to quickly recall addition and subtraction facts (around the world, individual, internet)
4. practice book pages – throughout the entire series
5. use manipulatives (large variety; straws, base ten blocks, soda caps, teddy bears, etc.) and a work mat to practice and represent to strategy and process of addition and subtraction
6. use dominos to practice vertical and horizontal addition and subtraction
7. roll 3 dice and line the dice up vertically to make a vertical addition problem and them move the dice to make a horizontal addition problem
8. create math problems on the whiteboard and trade with partner for them to solve
9. provide daily opportunities to add and subtract in real-life situations (snack-time, lunch, etc.)
10. create addition and subtraction word problems using pictures to represent the given situation – rubrics available online – www.rubistar.com
11. daily math practice
12. use fact families to understand the relationship between addition and subtraction facts
13. websites listed below can be used for practice

Assessment:

- math practice book pages – entire series will assess all performance indicators listed above
- math magician webpage certificates
- addition and subtraction story problems
- timed math facts tests
- various reproducible activities available in resource books and Teacher's Helper

Relevant Links:

http://www.oswego.org/ocsd-web/games/Mathmagician/cathymath.html - practice all math facts – addition and subtraction

http://www.internet4classrooms.com/skills_1st.htm#math – lots of addition and subtraction websites

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

TouchPoint Math and bulletin board numbers

Manipulatives to represent mathematical situations (dominoes, straws, counters, etc.)

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Geometric and Spatial Relationships	**Duration:** 1st semester

Show-Me Standards Content: MA 2,
Show-Me Standards Process: 1.6, 1.10, 3.3

Grade Level Expectations: 1A, 4A

Benchmarks:	**Performance Indicators:**
Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships. Use visualization, spatial reasoning and geometric modeling to solve problems.	1. Recognize and name 2- and 3-dimensional shapes using physical models (circle, triangle, trapezoid, rectangle, rhombus, sphere, rectangular prism, cylinder, pyramid) 2. Recognize geometric shapes and structures in the student's environment and specify the shape's location.

Activities and Assessments:

1. use wooden blocks, foam shapes, and geometric manipulatives to represent and name 3-dimensional shapes.
2. manipulate 12 cotton swabs or toothpicks to form a triangle, square, and rectangle. Discuss properties of each shape. Have students explain why a circle cannot be made.
3. participate in a scavenger hunt for 3-dimensional shapes in the classroom and at home. Develop a chart for the objects found.
4. use Geoboards to form various shapes
5. students may build upon the flat shape of a triangle, square and rectangle to assemble a three-dimensional shape – using mini marshmallows and plastic coffee stirrers to construct the shapes
6. tape small pictures of two- and three- dimensional shapes onto a beach ball and have student toss the ball. Have the student holding the ball identify the shape closest to their thumb.
7. computer lab – website listed below
8. record in daily journals a geometric shape found within the classroom
9. have a geometric food day in which the students bring in items in the various geometric shapes
10. go to the gym and allow students to use their bodies to form the various shapes
11. Geometric Shapes – Learning Resources
12. practice book pages – Chapter 5

Refer to geometry unit - three week calendar

Assessment:

- 3-dimensional shape activity (attached)
- math practice book pages – Chapter 5 – assesses both performance indicators
- teacher observation
- Shape Construction (attached)
- Constructed response item "Designing a House" (attached)

- oral testing on ability to properly name each physical model shown
- various reproducible activities available in resource books and Teacher's Helper
-

Relevant Links:

http://nlvm.usu.edu/en/nav/vlibrary.html - Geometry - **Geoboard - Isometric** – Use geoboard to illustrate three-dimensional shapes.

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Hands on geometric shapes and bulletin board packets

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Geometric and Spatial Relationships	**Duration:** 1st semester
Show-Me Standard Content: MA 2, **Show-Me Standard Process:** 3.3, 4.1	
Grade Level Expectations: 2A (1st grade), 2A (2nd grade)	

Benchmarks:	**Performance Indicators (Local Objective):**
Specify locations and describe spatial relationships using coordinate geometry and other representational systems	1. describe, name and interpret relative positions in space (left, right) 2. find and name locations with simple relationships on a map (coordinate system)

Activities and Assessments:

1. play 'Simon Says' using relative position words as directions
2. use overhead pattern blocks and create a desired arrangement – prompt students to describe the relative position of the pattern blocks
3. create a pattern block arrangement without showing it to the students – describe the location of each block, using relative position words and allow time for students to arrange their blocks accordingly
4. display in the classroom 'hand's' with 'Left' and 'Right' wrote on each hand
5. play the 'Hokey Pokey' using relative position words
6. coordinate systems are taught throughout Social Studies Series – several activities are found in the Teacher's Helper magazines located in the library
7. computer lab – website listed below
8. coordinate grids – do on the overhead and give oral directions for placement of items on grid
9. have students create their own coordinate grid and ask their partners questions

Assessment:

- math practice book pages – Chapter 8 assess coordinate grids & relative position
- coordinate grids assessment for Successlink (attached)
- social studies activity book pages
- teacher observation
- various reproducible activities available in resource books and Teacher's Helper
- one-on-one assessment with placing of pattern blocks when given orally by teacher

Relevant Links:

http://www.primaryresources.co.uk/maths/mathsE6.htm - lots of coordinate grid assessment and online activities

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Pattern blocks

LMC & computer lab with internet access

Phelps County R-3 School

Board Approved Date:
Modification Date:

Subject:	**Class Name:**
Mathematics	1st grade

Unit: Geometric and Spatial Relationships

Duration: Ongoing

Show-Me Standards Content: MA 2,
Show-Me Standards Process: 1.4

Grade Level Expectations: 3A (1st grade), 3A (2nd grade)

Benchmarks:	**Performance Indicators(Local Objective):**
Apply transformations and use symmetry to analyze mathematical situations.	1. use manipulatives to model slides and turns 2. use manipulatives to model flips

Activities and Assessments:

Pattern Blocks and Tangrams are to be used extensively to teach these lessons. Overhead Pattern Blocks, Tangrams, Teacher Enlarged set and individual student sets are available.

1. give students ample opportunities to select Tangram pieces and place them on top of the outlines on each page to 'cover-up' given shapes – students will slide, turn and flip pieces to complete activities
2. use tangram pieces to complete activities on pages that represent familiar objects
3. challenge students to make geometric shapes using the Tangram pieces
4. use geoboards to model shape then flip, slide and turn (individual and overhead)
5. overhead math stories 'The New Year's Tile' and 'Meera and the Glass Puzzle'
6. allow students to trace over pattern block then instruct them to slide, flip or turn and then trace over new shape
7.

Assessment:

- math practice book pages
- teacher observation
- various reproducible activities available in resource books and Teacher's Helper
- one-on-one assessment with sliding, turning and flipping can be given

Relevant Links:

http://nlvm.usu.edu/en/nav/category_g_1_t_3.html - transformation activities

Resources:

- Tangramables ‘Learning Resources’ copyright 1997 &1987
- MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Geometric and Spatial Relationships	**Duration:** Ongoing
Show-Me Standards Content: MA 2, **Show-Me Standards Process:** 1.10	
Grade Level Expectations: 3C (2nd grade)	
Benchmarks: Apply transformations and use symmetry to analyze mathematical situations.	**Performance Indicators (Local Objective):** 3. Recognize and create shapes that have symmetry

Activities and Assessments:

1. overhead math story 'Spider's Spinning Lesson'
2. use geoboards to teach and represent symmetry – placing one geoband down the center of a geoboard – this is the line of symmetry – and use another geoband to make a simple figure on one side of the line of symmetry and then create a mirror image on the other side
3. use diecuts to teach symmetry
4. math practice book pages – Chapter 5, Section B
5. butterflys – cut out butterflies – blob paint on one side of the butterfly, fold at the line of symmetry and create the exact same image on the other side of the butterfly
6. computer lab – website listed below
7. investigate things in our environment that are symmetrical (our bodies, butterflies, furniture, etc.) – allow students to research to find these items in the classroom, books, etc.
8. draw various shapes on the overhead or marker board and allow students to draw the line of symmetry.

Assessment:

- math practice book pages – Chapter 5, Section B assesses symmetry
- symmetry assessment 'attached'
- allow students to draw five objects that are symmetrical and draw the line of symmetry
- teacher observation
- various reproducible activities available in resource books and Teacher's Helper

Relevant Links:

http://www.primaryresources.co.uk/maths/mathsE5.htm - lots of symmetry activities

Resources:

‘Poof! And Other Overhead Math Stories’, Teaching Resource Center Publication, copyright 1997

‘Stretch-It!’, Teaching Resource Center, copyright 1994

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Geoboards & geobands – kindergarten

LMC & computer lab with internet access

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Algebraic Relationships	**Duration:** Ongoing
Show-Me Standards Content: MA 4, **Show-Me Standards Process:** 1.6, 3.5	
Grade Level Expectations: 1A, 1B	

Benchmarks:	**Performance Indicators (Local Objective):**
Understand patterns, relations and functions	1. Extend patterns of sound, shape, motion or a simple numeric pattern. 2. Describe how simple repeating patterns are generated.

Activities and Assessments:

1. daily opportunities to pattern and describe patterns of various items, shapes and colors will be given during calendar time.
2. use pattern blocks to demonstrate a pattern (overhead and hands on student manipulatives are available) and students repeat it
3. demonstrate sound patterns (clap, clap, stomp) and students will join the teacher, following the same sound pattern
4. math practice book pages – Chapter 1
5. introduce skip counting using 100's chart & even and odd numbers – students should master skip counting by 2's, 5's and 10's by memory and by any other figure, using a 100's chart
6. repetitive songs (Dr. Jean CD's) – extend and recognize patterns
7. predictable poems – place in pocket chart or on overhead – extend and recognize patterns
8. rhythmic chants – extend and recognize patterns
9. computer lab – websites listed below
10. predictable books ('Brown Bear, Brown Bear') – extend and recognize patterns
11. allow students to research and create their own predictable book (with a partner or by themselves) to follow the same pattern as 'Brown Bear, Brown Bear'
12. when patterning students will use letters (ABCD or numbers) to describe simple repeating patterns

Assessment:

- math practice book pages – Chapter 1 assess both performance indicator's
- Friend Pattern Bracelets – Performance Event (attached)
- various reproducible activities available in resource books and Teacher's Helper
- Sequence Patterns – Constructed Response Item (attached)
- Jelly Bean Hullabaloo – Performance Event (attached)

- ***Relevant Links:***

http://nlvm.usu.edu/en/nav/vlibrary.html - Algebra section

http://www.internet4classrooms.com/skills_1st_math.htm - full of algebraic relationship activities

Resources:

MAP 2000-2001 – Performance Event – Moberly School District

MAP 2003-2004 – Constructed Response Items – Buchanan R-IV School District

MAP 2001-2002 – Performance Event – Gallatin R-V School District

LMC collection of Teacher's Helper magazine

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Various mathematics resource books

Pattern blocks

Dr. Jean CD's

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Algebraic Relationships	**Duration:** Ongoing
Show-Me Standards Content: MA 1, 4, **Show-Me Standards Process:** 1.6, 3.1, 3.6	
Grade Level Expectations: 2A, 3A	

Benchmarks:	**Performance Indicators (Local Objective):**
Represent and analyze mathematical situations and structures using algebraic symbols. Use mathematical models to represent and understand quantitative relationships.	1. Represent a mathematical situation as an expression or number sentence. 2. Model situations that involve the addition of whole numbers, using pictures, objects or symbols. 3.

Activities and Assessments:

1. give mathematic problems orally and written – allowing students to use mathematical symbols and numbers to represent the mathematical situation
2. beginning of the year – allow student to use manipulatives – counters, straws, soda bottle caps, etc. To express addition and subtraction problems
3. create word problem journals
4. computer lab – using a word processing program – model how to 'type' a mathematics problem and allow students to draw pictures to go with their word problems
5. math practice book pages – begins with Chapter 2 and continues throughout the rest of the book
6. use dominoes and numbers to represent situations
7. construct number sentences from items of student interest and real life situations
8. allow student to make models (pictures) to solve problems
9. ask students to investigate items in the classroom that can be used to represent a mathematical situation
10. Math Problem of the Day

Assessment:

- math practice book pages – Chapter 2 through 12 – assesses all performance indicators listed
- various reproducible activities available in resource books and Teacher's Helper
- teacher observation
- word processing math problems
- word problem journals

Relevant Links:

Resources:

LMC collection of Teacher's Helper magazine

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Various mathematics resource books

LMC & computer lab with word processing

Phelps County R-3 School	Board Approved Date: Modification Date:
Subject: Mathematics	**Class Name:** 1st grade
Unit: Measurement	**Duration:** Ongoing
Show-Me Standards Content: MA 2, **Show-Me Standards Process:** 1.4, 3.7	
Grade Level Expectations: 1A	
Benchmarks: Understand measurable attributes of objects and the units, systems and processes of measurement.	**Performance Indicators(Local Objective):** Select the appropriate tool for the attribute being measured

Activities and Assessments:

1. teach each measurement tool one at a time before combining
2. nonstandard measurement includes unifix cubes, paper clips, chalkboard erasers,
3. tools to teach:
    - ruler (centimeter and inch) – class & student manipulatives and overhead
    - clock – class & student manipulatives and overhead
    - balance scale – class manipulative
    - thermometer – class & student manipulatives and overhead
    - money – class & student manipulatives and overhead
4. pose questions to students and allow them to select the tool
5. math practice book pages – Chapter 10
6. present tool to students and allow students to select an appropriate item and attribute to measure
7. interpret a calendar (calendar time)
    - days of the week (yesterday, today, tomorrow)
    - months of the year (before & after)
    - number of days in month (Ex: How many Fridays?)
    - name the whole date (day, month, date, year)
8. months of the year and days of the week song – Dr. Jean – reproducible book also available
9. math question of the day gives many measurement opportunities

Assessment:

- math practice book pages – Chapter 10
- tool identification and usage (observation)
- various reproducible activities available in resource books and Teacher's Helper

Relevant Links:

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Phelps County R-3 School

Board Approved Date:
Modification Date:

Subject:	**Class Name:**
Mathematics	1st grade
Unit: Measurement	**Duration:** 2nd semester

Show-Me Standards Content: MA 2,
Show-Me Standards Process: 3.3

Grade Level Expectations: 1C (1st grade) 1C (2nd grade)

Benchmarks:	**Performance Indicators(Local Objective):**
Understand measurable attributes of objects and the units, systems and processes of measurement.	1. tell time to the nearest hour 2. - tell time to the nearest half hour

Activities and Assessments:

1. develop understanding of length of time, day, hour, minutes – give examples and chart activities that take the various amounts of time
2. display classroom schedule with digital time and clocks to represent when each subject/special takes place
3. use student and teacher Judy Clocks and overhead manipulatives for many hands-on opportunities read "The Grouchy Ladybug" and create ladybug clocks – use clocks to represent time as the book is read
4. math practice book pages – Chapter 6
5. time stamps and ink pad may be used to form various times
6. create clocks with paper plates
7. time flashcards and puzzles
8. master concept of "long hand" is the minute hand and moves at 30 one-minute intervals within an hour – "short hand" – hour hand – moves very slowly to the next number
9. :00 time – long hand on 12 and short 'hour' hand points to the hour – Master time to the hour before proceeding to time to the ½ hour
10. :30 time – long hand on 6 and short 'hour' hand point is between 2 numbers – Example: 6:30 – hour hand is between 6 and 7; not to 7 yet so it must still be 6 – students extend hour hand with a line to distinguish the hour
11. computer lab – website listed below
12. master time to the ½ hour and then combinations
13. create clock on gym floor – students use jump rope or bodies to represent time

Assessment:

- math practice book pages – Chapter 6 assess all performance indicators listed
- teacher observation
- various reproducible activities available in resource books and Teacher's Helper
- time assessment (attached)

Relevant Links:

http://www.teachingtime.co.uk/ - excellent time practice

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Time & Money – McGraw-Hill Publishing – copyright 2000

LMC & computer lab with internet access

Students clock manipulatives, puzzles, flashcards and stamps

Relevant Links:

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Measurement	**Duration:** Ongoing
Show-Me Standards Content: MA 2, **Show-Me Standards Process:** 3.3	
Grade Level Expectations: 1D	
Benchmarks: Understand measurable attributes of objects and the units, systems and processes of measurement.	**Performance Indicators(Local Objective):** - count money to fifty cents, including quarters and half dollars

Activities and Assessments:

1. review identification and known value of penny, nickel and dime – using overheard, student manipulatives and bulletin board set as visual recognition and reminder
2. introduce quarter and half-dollar identification and coin values
3. begin counting of money with the following sequence:
    0. penny
    1. nickel
    2. nickel & penny
    3. dime
    4. dime & penny
    5. dime & nickel
    6. dime, nickel & penny
    7. quarter
    8. quarter & penny
    9. quarter, dime, nickel & penny
4. use overhead coins for whole and small group practice
5. practice book pages – Chapter 9
6. provide student with film canisters and a selected variety of manipulative coins
7. represent date of the month with coins during calendar time each day
8. compare values of items within the classroom
9. money stamps, flashcards and puzzles
10. use reproducibles for coin and value recognition and counting
11. allow students to use coin manipulatives to represent money values indicated on a variety of coupons
12. create a "store" in which students may trade coins for shopping items

Assessment:

- math practice book pages – Chapter 9
- teacher observation
- 'Christmas Store' – Successlink activity attached
- various reproducible activities available in resource books and Teacher's Helper
- money assessment (attached)

- "Shopping Trip" – Math Performance Event

Relevant Links:

http://www.internet4classrooms.com/skills_1st.htm - lots of money practice

http://tiger.towson.edu/~mlackn1/mathwebsitestudent.htm - interactive money games

http://www.aplusmath.com/Flashcards/ - money flashcards

Resources:

- MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

- Successlink – 'Christmas Store' activity
- Time & Money – McGraw Hill – copyright 2000
- Money – Teacher Created Materials – copyright 2003
- Math Performance Event 'Shopping Trip'– Gasconade R-2 School District
- Money manipulative, puzzles, flashcards and stamps

Relevant Links:

Phelps County R-3 School	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Measurement	**Duration:** Ongoing
Show-Me Standards Content: MA 2 **Show-Me Standards Process:** 3.3	
Grade Level Expectations: 2A	
Benchmarks: Apply appropriate techniques, tools and formulas to determine measurements	**Performance Indicators(Local Objective):** 1. Use repetition of a single unit to measure something larger that the unit.

Activities and Assessments:

1. measure larger items using various classroom materials:
   - paperclips
   - chalkboard erasers
   - rulers
2. allow students to predict (estimate) and then measure and correct their prediction
3. liquid measuring (how many cups of water will it take to fill this bucket)
4. use all hands-on materials to teach this objective
5. practice book pages – Chapter 10
6. use beans to measure capacity
7. allow students to research a variety of ways of measuring various items
8. counters used for weight measurement

Assessment:

- math practice book pages – Chapter 10
- teacher observation
- 'Measuring Inch by Inch' – Math Module (attached)
- various reproducible activities available in resource books and Teacher's Helper

Relevant Links:

Resources:

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Measurement tools

Measuring Inch by Inch' – Jefferson R-7 School District

Phelps County R-3	**Board Approved Date:** **Modification Date:**
Subject: Mathematics	**Class Name:** 1st grade
Unit: Data and Probability	**Duration:** Ongoing
Show-Me Standards Content: MA 3, **Show-Me Standards Process:** 1.2, 1.8	
Grade Level Expectations: 1A, 1B, 1C	

Benchmarks:	**Performance Indicators (Local Objective):**
Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.	1. Pose questions and gather data about themselves and their surroundings. 2. Sort and classify items according to their attributes. 3. Represent data using pictures and bar graphs.

Activities and Assessments:

1. daily graphing of the weather during calendar time – helper of the day will observe the weather and graph their findings on the weather pocket chart – questions will be posed to students using information from the weather chart
2. 2nd semester – students will predict the temperature during calendar time and compare this prediction with the thermometer and graph the daily temperature
3. monthly activities will involve graphing of seasonal related items:
   - August – # of boys and girls in our classroom
   - September – favorite type of apple (Johnny Appleseed Day)
   - October – graph candy wrappers (Halloween)
   - November – things we are thankful for
   - December – M & M graphing activity
   - January – favorite pet
   - February – Valentine hearts graphing activity
   - March – Lucky Charms graphing (St. Patrick's Day)
   - April – Easter graph
   - May – summer related graph
4. sort and classify items weekly – including students shoes, attribute blocks, coins, students, crayons, etc. – sorting and classifying will occur with teacher direction and students will also sort and classify and allow classmates to determine how the items are classified
5. graphing will be in the forms of line, bar, picture, horizontal, and vertical graphs
6. students will be required to research about an animal of their choice and gather required data (2nd semester)
7. brainstorm a list of graphing topics as a class. Divide students into groups of four and have the group select a topic, develop a survey, and poll their classmates. Each group will analyze the results and design a graph to present to the class. (Assessment)

Assessment:

- Item # 7 listed above – scoring guide attached
- math practice book pages
- various reproducible activities available in resource books and Teacher's Helper
- Apples, Apples, Apples – Performance Event (attached)
- Online activity #2 listed below

Relevant Links:

http://nces.ed.gov/nceskids/graphing/index.asp - create a graph online

http://www.bbc.co.uk/education/mathsfile/shockwave/games/datapick.html - excellent interactive activity in which students are interviewed and the results are tallied and graphed – assessment available

Resources:

MAP – Performance Event – Leserville R-IV School District

LMC collection of Teacher's Helper magazine

MacMillan/McGraw-Hill Math, copyright 2005, Grade 1

Various mathematics resource books