**Measurement**

**Area**

**Goals:**
Develop concept of area.
Promote Mathematics communication.
Practice measuring skills.

**Materials:**
grid paper
pencil

**Steps:**
1. This square is one centimeter long on each side. The area if the square is one square centimeter.

2. Guess how many square centimeters will equal these shapes?

3. Use the square centimeter grid paper to check your guesses.

   A. \[\text{Guess } \underline{\text{cm}} \quad \text{Check } \underline{\text{cm}}\]

   B. \[\text{Guess } \underline{\text{cm}} \quad \text{Check } \underline{\text{cm}}\]

   C. \[\text{Guess } \underline{\text{cm}} \quad \text{Check } \underline{\text{cm}}\]

   D. \[\text{Guess } \underline{\text{cm}} \quad \text{Check } \underline{\text{cm}}\]

4. Which is largest? \underline{\text{cm}}

5. Guess \underline{\text{cm}} cm and check \underline{\text{cm}} cm the area for this irregular shape.
Measurement

Volume

Goals:
Develop concept of volume.
Promote Mathematics communication.
Practice measuring skills.

Materials:
units
longs
flats
cubes
measunng cup
plastic tub
rubber band
water

Steps:
1. Here is another square centimeter. Look at the small cubes. How big is each face? ________ cm
2. These cubes that have six faces of 1 cm are called a cubic centimeter.
3. Find the object that is 1 cm thick, 1 cm high, and 10 cm long. How many cm is this object? __________ What is the volume? __________
4. Find the object that is 1 cm high, 10 cm long, and 10 cm wide. How many cm is this object? ________________ What is the volume? ________________
5. Find the object that is 10 cm high, 10 cm long, and 10 cm wide. How many cm is this object? ________________ What is the volume? ________________
6. 1000 cm holds exactly one liter. Each liter will hold 1000 milliliters.
7. How many cm are in a liter? __________
8. Look at the plastic tub. How far up would the water level go if one liter were in the tub? Mark it with a rubber band.
9. Discuss how to fill the tub with 1 liter of water using the measuring cup.
10. Fill the tub. How close was your guess?
6. Guess and check the mass of each object below.
   a. thimble   guess ______ gm check _______ gm
   b. diaper pin guess ______ gm check _______ gm
   c. button    guess ______ gm check _______ gm
   d. button    guess ______ gm check _______ gm
   e. spool     guess ______ gm check _______ gm
   f. penny     guess ______ gm check _______ gm
   g. dime      guess ______ gm check _______ gm

7. Stand on the scale. How many kilograms do you weigh? _____________ kg

8. How many grams are in a kilogram? _____________ g

9. How many grams do you weigh? _____________ g

10. Look again at the cubic centimeter cube. It is made to weigh about 1 gram.

11. The 1 cm equals 1 cc equals 1 g.

12. Look at the measuring cup. Find the markings for cc's.

13. Put the empty cup on the scale and zero the scale. This means to turn the knob
    so that the scale says zero when the cup is on it.

14. Fill the cup with 180 cc water. What do you think the mass will be? ______ g

15. Weigh the cup on the zeroed scale and find the mass of the water. ______ g

16. How close was your guess?
Measurement

Temperature

Goals:
Develop concept of temperature.
Promote Mathematics communication.
Practice measuring skills.

Materials:
thermometer
pencil

Steps:
1. Look at the thermometer.

2. It measures in metrics, in degrees celcius. This is different from Farenhiet degrees that we are normally used to.

3. Look at this chart:
   freezing water          0 degrees Celcius
   autumn day              10 degrees Celcius
   comfortable room       20 degrees Celcius
   hot day                 30 degrees Celcius
   body temperature        37 degrees Celcius
   boiling water           100 degrees Celcius
   baking a cake           175 degrees Celcius

4. What is the temperature in this room? __________
Measurement

How Big is a Foot

Goals:
Develop concept of standard and non-standard measurement.
Promote Mathematics communication.
Promote Literature and Mathematics.

Materials:
How Big is a Foot by Rolf Myller

Steps:
1. Read the story and discuss.
2. What was the King's problem?
3. What was wrong with how the King measured the Queen's bed?
4. Each of you can measure the length of the table with the length your foot.
5. How many feet is the table?
6. Are the two measures different? Why?
7. Each of you made a non-standard measure of the table.
8. How could you measure the table and make a standard measure?
Time and Money

Calendars

Goals:
Promote Mathematics communication.
Develop concept of calendars and their patterns.

Materials:
Strip Calendar
Blank Calendar
Crayons

Steps:
1. Look at the strip calendar. How many colors are there? There is one for each month! How many boxes are there? There is one for each day of the year!
2. Make your own calendar of April beginning with today, the 15th. Count backward and forward to complete the month.
3. Label the days of the week at the top. Write April at the top.
4. Fill in any special days for your family in April. Draw or write for each one.
5. Continue through May and as many months as you like.
6. Look at the calendars for April and May. Are the patterns the same?
7. Count the number of each day of the week in each month. Are they the same for different days? For different months? Which days occur most?
8. On the back, list the dates of the Mondays, Tuesdays, Wednesdays, Thursdays.... Can you find a pattern in these dates? Are they the same for each month? What number did you count by for each list.
9. If the first Tuesday is the fifth, can you tell what the third Tuesday is without looking at a calendar?
10. Are there any dates that fall on the same day in each month? Which ones? Why?
11. How would the patterns change for a month with 30 days, 31 days, 28 days, leap year?
12. Keep a calendar at home and write in what you do each day, and what the weather is each day.
Time and Money

Grouchy Ladybug

Goals:
Develop Concept of time.
Promote Mathematics and literature.
Practice telling time.
Promote Mathematics communication.

Materials:
The Grouchy Ladybug by Eric Carle
Ladybug sheet (From Mailbox Magazine)
Time sheets(From Mailbox Magazine)
Crayons
Scissors
Glue
Brads

Steps:
1. Read and discuss the Grouchy Ladybug. Pay special attention to the clocks!
2. Color your two lady bug wings and your ladybug head.
3. Cut them out.
4. Choose a time sheet and cut it out.
5. Fill in the sheet with the tie, clock hands, and the activities that you do throughout your day. Discuss where the hands on the clock go what the numerals are, and what activity you do at that time.
6. Glue as many lists together as you need.
7. Fold your time sheets, each box back and forth, like an accordion.
8. Glue your ladybug head to the top of your list.
9. Use your brad to put your wings on your ladybug. Have Fun!
10. You could make one out of construction paper at home like the sample. Feel free to take a handout to do so.
To assemble a ladybug timetable booklet:

1. Glue strips together
2. Glue strip to head
3. Fold pages
4. Attach wings and decorations

Use these patterns with "Timetable Booklets" on page 44.
Time and Money

Alexander Who Used to Be Rich Last Sunday

Goals:
Develop concept of coins and dollar bills.
Promote literature and Mathematics.
Promote Mathematics communication.
Develop skills of counting money and place value.

Materials:
Play Money
Money Place Value Chart
Alexander Who Used to Be Rich Last Sunday
Paper
Crayons

Steps:
1. Read Alexander Who Used to Be Rich Last Sunday and discuss.

2. Look at the Place Value Chart and practice modeling money amounts. Write down the numerals you model on paper as well.

3. Read the story again and model each step of the story with the play money and the chart. Again, you may want to write the numerals as well.

4. Read the story one more time, and try to write the amounts and the steps without modeling them.

5. Pretend to buy and sell items with the play money. Practice counting out the price, the change, and counting back the change.
**Probability and Statistics**

**Chips, Chips, Chips**

**Goals:**
Practice skill of graphing data.
Promote Mathematics communication.
Develop concept of mean, median and mode.

**Materials:**
Colored chips
Data Sheet
Graph Paper
Crayons
Bucket

**Steps:**
1. Pour the colored chips into the bucket and mix them up. Don't peek, and draw out a chip. Record what color you got.
2. Each of you can do this ten times.
3. Now look at your graph paper. Color each color word with the corresponding crayon.
4. Place each chip on a box above the correct color. You have made a real graph. This means that there are real objects on the graph.
5. Color in the boxes below the chips in the matching colors. Label the side of the graph with numbers up to the top. This is a bar graph of the data that you collected on the colors of chips.
6. Now replace the chips onto the graph. Move the chips from the taller bars to the shorter bars so that all the bars are even. How many chips are in each bar?
7. This is the average or the mean of the number of each color of chips.
8. Remove the chips. Which color were there the most chips? This is the mode, the color that occurred most often.
9. Take another crayon in a new color. Put a dot in the center of he top of each bar. Connect the dots. This line is called a line graph.
10. Group the chips again by color. Put the groups in order from smallest number of chips to largest. Which group is in the middle? This is called the median or middle color.
11. Draw a circle on the back of your graph. Can you divide the circle into pieces, like a pie, so that the biggest piece is the color of the chips that there are the most, and the smallest piece is the color of the chips that there is least of. Fill in the rest according to their size.
Data Sheet

<table>
<thead>
<tr>
<th>Draw From the Bucket</th>
<th>Chip Color</th>
<th>Draw From the Bucket</th>
<th>Chip Color</th>
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Probability and Statistics

More Chips

Goals:
Promote Mathematics communication.
Develop concept of probability.

Materials:
Bag of 10 chips in different colors
Record Sheet

Steps:
1. Shake up the bag of chips.

2. Draw a chip from the bag and record what color you drew.

3. Guess what color you will draw first and discuss why you guessed it. Record your guess.

4. Guess and check ten times.

5. How many times were you correct? Probably not too many times.

6. Lets try to find a way to make a better guess. Dump the chips out. Record how many of each color there are in the bag. Record how many chips.

7. Probability is a description of a pattern. Fill in this statement - There are ___ red chips out of ___ chips total. The probability of a red chip is the number of red chips divided by the total number of chips.

8. Find the probability of each chip. Discuss how this could help your guesses.

9. Guess ten more times. Were you right every time? Probably not. This is because probability tells us the pattern we expect, but will not tell us a specific outcome of one draw.

10. How could we change the chips so that we could be sure of the color we would draw every time? There is only one way!!
Record Sheet

<table>
<thead>
<tr>
<th>Guesses</th>
<th>Actual Draw</th>
<th>Correct? Y or N</th>
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<td>#1</td>
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Total Y's

Probabilities

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<th>Guesses</th>
<th>Actual Draw</th>
<th>Correct? Y or N</th>
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</table>

Total Y's
Probability and Statistics to Take Home

Survey

Goals:
Promote Mathematics communication.
Develop skills of data collecting graphing, and interpreting.

Materials:
Paper
Pencil

Steps:
1. Choose a question from the list or make up your own.
2. Ask as many people as you can and record the answers.
3. Graph this data in each of the three ways we did before bar graph, line graph, and pie graph. If possible, make a real graph.
4. Find the mean, median, and mode.
5. What does this information tell you? Discuss it with a family member.
SOME SURVEY TOPICS

1. How many brothers do you have? How many sisters?
2. How far do you travel to go to school?
3. What is the first letter of the name of the street you live on?
4. Do you live on a street, avenue, boulevard, lane, road...?
5. In what state or country were you born?
6. How many letters are there in your first name? Your last name?
7. What is your favorite color?
8. What is the length of your left thumbnail?
9. What is your shoe size?
10. What day of the week were you born? (Look in the telephone directory for a calendar, or call the public library.)
11. What is the next to last letter in your first name? Your last name?
12. What would you like to be when you grow up?
13. What is the last digit of your telephone number?
14. What is the third digit of your telephone number?
15. What is your favorite ice cream flavor? (You may want to ask people to choose between vanilla, chocolate, and strawberry.)
16. Who is your favorite singer?
17. What kind of pet do you like best?
18. What time did you go to bed last night?
19. What did you have for breakfast?
20. How many aunts and uncles do you have?
Geometry

Symmetry

Goals:
Develop a concept of symmetry.
Promote Mathematics communication.
Make and identify lines of symmetry.

Materials:
paper
scissors
symmetric pictures
the alphabet
mirror
crayons

Steps:
1. A figure is symmetric if it is the same on each side. If I can fold a figure in half, and there is a perfect match of the two sides, then I have a symmetric figure. Many figures have more than one place where this line, or fold, can be made.

2. Look at the pictures, can you find some lines of symmetry?

3. You can make your own symmetric pictures.

4. Draw a picture on some paper.

5. If you hold up a mirror to your picture, can you hold the mirror so that the reflection in the mirror, and the picture on your paper, combined form a symmetric figure? (The mirror should be your line of symmetry.) Why does this work?

6. Use scissors to make a symmetric shape.
   a. Fold a paper in half, and cut out a shape along the fold. The unfolded shape is symmetric, as is the paper that is left. Why?
   b. Fold a paper in half many times and see how many symmetric shapes can be made.
   c. Can you find the lines of symmetry?

7. Look at the alphabet. Which shapes are symmetric? Look at upper case and lower case letters. Do you know anyone's name who is symmetric?
**Geometry**

**Construct a Picture**

**Goals:**
Identify and use line, segment, point, ray, obtuse angles, right angles, straight angles, and acute angles.
Promote Mathematics communication.
Develop logical thinking and reasoning skills.

**Materials:**
Figure cards
Paper
Crayons

**Steps:**
1. Review the terms for this activity and discuss examples of each.
   a. A point is like a dot. It is infinitely small. It points out one particular point in space.

   ![Point Example]

   b. A line is an infinite number of points together in a row. A line goes on forever each way. This is why we have arrows.

   ![Line Example]

   c. Two points, and all the points in a row between them, make up a line segment. A segment has a stop and start, it does not go on forever and it has no arrows.

   ![Segment Example]

   d. A ray is a point and all the points in a row to one side of it. A ray has a starting point, the vertex, but no stopping point. This is why there is only one arrow.

   ![Ray Example]
e. Two rays that share a vertex form an angle.

f. An angle that is between 0 and 90 degrees is an acute angle.

g. An angle that is between 90 and 180 degrees is an obtuse angle.

h. An angle that is 90 degrees is a right angle.

i. An angle that is 180 degrees is a straight angle.

2. Draw a picture by drawing a figure card. You must draw the figure stated on the card. Try to make a picture from a series of draws.

3. For example if I drew a card with a line segment, I would draw a line segment. Then if I drew a ray, I would try to add a ray to the picture. See what kind of picture you could make.
| POINT          | ACUTE ANGLE |
|               |            |
| LINE          | OBTUSE     |
|               | ANGLE      |
| LINE          |            |
| SEGMENT       | RIGHT      |
|               | ANGLE      |
|               |            |
| RAY           | STRAIGHT   |
|               | ANGLE      |
Geometry

Hide and Seek

Goals:
Become familiar with the Cartesian coordinate system.
Practice plotting points on a graph.
Promote Mathematics communication.
Develop logical thinking and reasoning skills.

Materials:
Graph Paper
Crayons
Scrap paper

Steps:
1. Graphing a point on the graph has two parts. To graph the point (3,4)
   a. Go over to three on the bottom of the graph.
   b. Go up four on the graph.
   c. This is the point (3,4)

2. Choose a hider and a seeker.

3. The hider chooses a point on the graph and jots it down on scrap paper. Don’t let anyone see!

4. The seeker guesses a point on the graph by naming it and then coloring it in. Be sure to discuss if the point named matches the point colored and why.

5. The hider says yes or no and gives a clue of either up, down, left, or right.

6. Keep guessing until the hider is found.

7. Trade roles and play again!
Geometry to Take Home

Symmetric Treasure Hunt

Goals:
Develop concept of symmetry.
Identify lines of symmetry.
Promote Mathematics communication.

Materials:
Your Home!
Paper
String
Crayons

Steps:
1. Each player searches the house for things or for pictures of things that are symmetrical. Find as many as possible.

2. Each player then must show with the string where the line of symmetry is for each symmetric object or picture.

3. A player gets one point for each line of symmetry found. Remember, some objects have more than one!

4. After the player has shown all the lines of symmetry, the other players can earn a point for finding any lines that the first player missed.

5. Then the next player shows his or her objects.

6. The player with the most points wins!
XII. Master List of Materials

Problem Solving:

**Draw a Picture**
- Paper
- Crayons
- Problem Steps Poster

**Act out the Problem**
- Paper
- Crayons
- Problem Steps Poster
- Play Money
- Pencils
- Cups
- Saucers

**Use Objects**
- Paper
- Crayons
- Problem Steps Poster
- Beans

**Guess And Check**
- Paper
- Crayons
- Problem Steps Poster

**Work Backwards**
- Paper
- Crayons
- Problem Steps Poster

**Make a List**
- Paper
- Crayons
- Problem Steps Poster
Look for Patterns
Paper
Crayons
Problem Steps Poster

Use all the Strategies!
Paper
Crayons
Problem Steps on a sheet of paper

Whole Number Sense:

Egg Carton Numbers
Egg Carton
Basket of Beans

Dots and Dots and Dots!
Cards with two, four, five, six, seven, eight, nine, ten, eleven, and twelve dots on them
Beans
Number Sheet
Crayons

M&M Math
One bag of M&M's per student
The M&M Book

Everyday Estimation
Index cards or scraps of paper
Tape
Pencils
String

Place Value:

Guessing and Grouping
Place Value chart for ones, tens, hundreds, and thousands.
A large bucket of ones units.
Base ten block set.
Record Sheet
Crayons
Placing Digits
Paper
Crayons
Deck of Cards

Guess and Group Take Two
A large bowl of a small object (buttons, beans, bobby pins, paper clips...)
Paper
Crayons
Record sheet

Memory
Deck of number cards

Fractions:

Geo Islands
Geo Board
Geo Islands
Rubber bands
Fraction sheet

Fraction Cards
Graph paper with pre-drawn units.
Crayons
Fractions Cards

Fraction Mobile
Index cards
Hangers
String
Hole punch
Crayons
Scissors

Order Please!
Graph paper with pre-drawn units
Crayons
Fraction cards
Order cards
Ordering mat
Name Game
Name Sheet
Crayon

Decimals:

Base Ten Blocks - Decimal Style!
Base ten blocks set
Place Value decimal chart
Paper
Crayons

Dueling Decimals
Deck of cards
Base Ten blocks set
Two Place Value Decimal Chart
Crayons
Paper

Computation:

Multi - Link Cubes
Multi - Link cubes
Crayons
Paper

Number Puzzle
Number Cards
Computation sheet

Dice
Number Strip 1 - 12
Beans
Two die

Fill in the Blanks!
Deck of cards
Calculators:

Nimble races
   Each pair of players needs one calculator

Pathways
   Calculators for each player
   Calculator paths
   Two types of markers

Aunt Bebe
   Record sheet
   Calculator
   Pencil

human calculator
   Calculator
   Paper
   Crayons
   Tape
   Large Paper Calculator "Buttons."

Spatial Awareness:

Pattern Blocks
   Pattern Blocks
   Paper

Geometric Solids
   Geometric solids
   Clay

Tangrams
   Tangrams
   Grandfather Ping
   Tangram shape cards

Shape Scavenger Hunt
   Paper
   Crayon
Measurement:

**Length**
pencil
meter cardboard strips
decimeter straws
centimeter cubes
metric trundle wheel
tape measure
ball
calipers
objects to measure with calipers

**Maps**
map
paper
pencil

**Area**
grid paper
pencil

**Volume**
units
longs
flats
cubes
measuring cup
plastic tub
rubber band
water

**Mass**
balance scale
masses
thimble
diaper pin
button
button
penny
dime
spool
scale
cubic centimeter units
measuring cup
More Chips
Bag of 10 chips in different colors
Record Sheet

Survey
Paper
Pencil

Geometry:

Symmetry
paper
scissors
symmetric pictures
the alphabet
mirror
crayons

Construct a Picture
Figure cards
Paper
Crayons

Hide and Seek
Graph Paper
Crayons
Scrap paper

Symmetric Treasure Hunt
Your Home!
Paper
String
Crayons

Registration
Decorations
Evaluations
Drawing registrations
Sign In Sheets
Passports
Prizes
XIII. Registration and Check Out

Registration:

The Storer Elementary School Family Math Fair had an involved registration process. Upon entering the Math Fair families were asked to sign in on the registration list. This sign-in allowed the staff to keep an accurate count of those participating. The families received a guide to the Family Math Fair in order to explain the event and the process of the evening. Families could progress to any station they like, and could stay as long as they like at any station or activity, but it was suggested that they walk through and see all the stations first, before staying at one too long. The backside of the guide listed all of the stations and reminded the families to check out before they left. Families were also reminded of the prizes. Each family was given a raffle ticket for the prizes. They could turn in the Family Math Scavenger Hunt for an extra entry. Finally, before their "Mathematical Journey" begun, each student is given a passport. This was taken to each station and was stamped as the family progressed through the Math Fair. All of the materials for registration are included here.
<table>
<thead>
<tr>
<th>Family Name</th>
<th>Child's Name</th>
<th>Grade Level</th>
<th>Teacher</th>
<th># in Group</th>
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<tbody>
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Family Math Fair
Welcome Storer Families!

Ok, Now that we are here, What do we do!??!!

1. Sign in at the registration table.
2. Register for the drawing.
3. Turn in your Family Math Scavenger Hunt sheet for an extra chance!
4. Pick up a Math Passport.
5. Select a station to begin with.

At each station what will I find?

Each station has games and activities to do that are related to the station topic. Whenever possible, each station has activities that are appropriate for each grade level. A Staff Member will be at each station to guide and assist you. Each activity has a handout that includes the goals of the activity, the steps of the activity, and the materials needed. Each activity involves multiple steps. These steps are for various grade and ability levels. Choose the steps that best suit the ability level of the student. The handouts are yours to take home. Many activities can be done easily at home and we encourage you to try them again as often as you like. It is our hope that they are enjoyable. Take Home activities are also included at each station. These are handouts for activities to do at home, but that are not offered here this evening. The station names are listed on this sheet.
How much time do I have?

The Math Fair lasts until 8:30pm. You and your family may rotate around to each station at your own pace. You may get hooked on an activity and stay awhile! You may visit as many or as few stations as you like. We do encourage you to visit each station first, before you decide on the area where you would first like to stay and spend some additional time. Remember also, that if you have your passport stamped at each station, you will get a prize! Have a great Journey through Mathematics!

Stations:

Spatial Awareness
Number Sense
Computation
Measurement
Place Value
Decimals
Fractions
Probability
Time & Money
Problem Solving
Calculators
Geometry

Don't forget the check out station before you leave!
Enter the Drawing for a prize!!!!!!!
Happy Happy Mathematics!

Your Name ____________________________

Your Teachers Name ____________________________
Passports:

Visit each of the twelve stations. As you leave a station, be sure to get your passport stamped! Get all the stamps, and get a prize at the registration check out!
Check Out

After each family finished visiting the stations at the Storer Elementary School Family Math Fair, and they were ready to go home, they were asked to check out. Each student received a prize for attending the Math Fair. Here, the student could also show their fully stamped passport for another prize. Most importantly, though, each student and each adult was asked to fill out an evaluation of the Family Math Fair. Here the staff could get ideas for future Math Fairs! The evaluations were anonymous and thrown into a big suitcase (sticking to the theme of a Journey through Mathematics). These evaluations are included here.
**Family Math Fair**  
**Adult Evaluation**

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Student's Grade Level ____________________

What was your favorite part of the Math Fair?

What was your least favorite part?

What would you add to the Family Math Fair if we did this again?

What part of the Math fair did your student seem to best enjoy?

How did you like the idea of providing ideas to take home?

How did you decide to come tonight?

How well do you feel that this event was publicized? What more could have been done?

How did you feel that the staff did tonight?
Family Math Fair
Student Evaluation

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Grade Level ________________

What was your favorite part of the Math Fair?

What was your least favorite part?

What would you add to the Family Math Fair if we did this again?
XIV. Prizes

The creator of the Storer Elementary School Family Math Fair was lucky to have received support from the community. Being able to have prizes encouraged more families to attend the event, and added an extra element of excitement. Coupons were donated for fast food treats. Each child received one for attending the event, and could earn another one for turning in a fully stamped passport.

A raffle drawing was also held. Each family could enter at registration, and turning in a Family Math Scavenger Hunt also provided a family with an extra chance. Mathematics manipulatives were donated as well as a gift certificate for Target. A Family Math book was also donated by a project mentor. A list of those who gave donations for prizes is included in the Acknowledgments section of this project.
XV. Evaluation

The Family Math Fair was a great success! We had 23 families attend the Math Fair, and 55 people. Everyone had a good time. We met our goals for the evening. Our first goal was to improve attitudes of families and students toward mathematics. Everyone was smiling, laughing, and having a good time doing mathematics. Many positive comments on evaluations were made. Families were surprised to see that mathematics is fun! Adults mentioned that their students had so much fun that they did not even realize that they were learning. Many adults came just to have a good time with mathematics and show their children that mathematics is enjoyable.

Our second goal was to involve families. This goal was also achieved. The families stayed together and worked together. Students showed the adults the kinds of things they were doing in their class and the adults asked many questions. Many adults suggested more activities like this, in many subject areas. Comments on evaluations were extremely positive. Families enjoyed the opportunity to do something together.

Our third goal was to provide educational learning experiences. The activities were all based on the proficiencies over which the students are tested. Many students and adults told the staff about something new that they had learned, or something that they had forgotten, but remembered.

If I were to do the Family Math Fair again there are some things I would do differently. I would allow for more time and more space. Perhaps a hallway event on a Saturday afternoon would be good. I would also include refreshments. I would have more decorations and promote the theme more. I would allow a separate day to set up and to explain the activities to the staff. There was just too
much to do before the Math Fair. Finally, I would have more specific questions on the evaluations to gain even more specific feedback from the families. I would also do follow up evaluation on how this event affected the overall attitudes and abilities of the participants over time. Not being affiliated with Storer, I was not able to do this follow up for this Family Math Fair. Overall, though, the Family Math Fair was a great success.
Family Math Fair
Student Evaluation

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Grade Level ______________________

What was your favorite part of the Math Fair?

What was your least favorite part?

What would you add to the Family Math Fair if we did this again?
Family Math Fair
Student Evaluation

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Grade Level __ 3 __________

What was your favorite part of the Math Fair?

Be with my family and

Problem solving

What was your least favorite part?

Fractions

What would you add to the Family Math Fair if we did this again?

A time test
Family Math Fair
Adult Evaluation

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Student's Grade Level 3

What was your favorite part of the Math Fair?
All of the hands on activities

What was your least favorite part?
Clothing

What would you add to the Family Math Fair if we did this again?
More publicity

What part of the Math fair did your student seem to best enjoy?
Computation + Math game

How did you like the idea of providing ideas to take home?
Excellent!!

How did you decide to come tonight?
I want my daughter to see that math can be fun

How well do you feel that this event was publicized? What more could have been done?
The notices were good but more could have been better

How did you feel that the staff did tonight?
Very good
Family Math Fair
Adult Evaluation

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Student's Grade Level [3, 5]

What was your favorite part of the Math Fair?
Problem Solving

What was your least favorite part?
Fractions

What would you add to the Family Math Fair if we did this again?
Maybe more stations, so we could visit all of them

What part of the Math fair did your student seem to best enjoy?
Problem Solving

How did you like the idea of providing ideas to take home?
Great idea!

How did you decide to come tonight?
Wanted a family activity

How well do you feel that this event was publicized? What more could have been done?
Very well, plenty of advance notice

How did you feel that the staff did tonight?
Very helpful, very competent
Family Math Fair
Adult Evaluation

Please take a moment to fill out this evaluation of our Family Math Fair tonight!

Student's Grade Level ____________

What was your favorite part of the Math Fair?

Suggestions for home activities

What was your least favorite part?

Not Enough Time...

What would you add to the Family Math Fair if we did this again?

What part of the Math Fair did your student seem to best enjoy?

Any hands-on activities

How did you like the idea of providing ideas to take home?

Good

How did you decide to come tonight?

Scavenger Hunt was encouraging to student

How well do you feel that this event was publicized? What more could have been done? Very well

How did you feel that the staff did tonight? Excellent
XVI. Photographs
XVII. Sources

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The Family Math Fair was only made possible through a great deal of support. I would like to thank all those who made this event possible:

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* Dr. Joann Edmonds, Honors College Dean

* Mr. Harold Roberts, Storer Elementary School Principal

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