FIRST GRADE MATHEMATICS UNIT 4 STANDARDS

Dear Parents,

We want to make sure that you have an understanding of the mathematics your child will be learning this year. Below you will find the standards we will be learning in Unit Four. Each standard is in bold print and underlined and below it is an explanation with student examples. Your child is not learning math the way we did when we were in school, so hopefully this will assist you when you help your child at home. Please let your teacher know if you have any questions C

MGSE1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.

This standard calls for students to indirectly measure objects by comparing the length of two objects by using a third object as a measuring tool.

Example:

Which is longer: the height of the bookshelf or the height of a desk?

Student 1:	Student 2:
I used a pencil to measure the height of the	I used a book to measure the bookshelf and it
bookshelf and it was 6 pencils long. I used the	was 3 books long. I used the same book to
same pencil to measure the height of the desk	measure the height of the desk and it was a
and the desk was 4 pencils long. Therefore, the	little less than 2 books long. Therefore, the
bookshelf is taller than the desk.	bookshelf is taller than the desk.

It is beneficial to use informal units for beginning measurement activities at all grade levels because they allow students to focus on the attributes being measured. The units need to correspond to standard units of measurement and this relationship should always be expressed by the teacher.

MGSE1.MD.2 Express the length of an object as a whole number of length units, by lying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. (Iteration)*

This standard asks students to use multiple copies of one object to measure a larger object. This concept is referred to as iteration. Through numerous experiences and careful questioning by the teacher, students will recognize the importance of making sure that there are not any gaps or overlaps in order to get an accurate measurement.

Example: How long is the paper in terms of paper clips?



MGSE1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.

This standard calls for students to read both analog and digital clocks and tell and write the time. Times should be limited to the hour and the half-Students need experiences exploring the idea that when the time is at the hour hand is between numbers and not on a number. Further, the hour is the before where the hour hand is. For example, in the clock at the right, the The hour hand is between the 8 and 9, but the hour is 8 since it is not yet on



MGSE1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

This standard is taught throughout the first grade year.

This standard calls for students to work with categorical data by organizing, representing and interpreting data. Students should have experiences posing a question with 3 possible responses and then work with the data that they collect. For example:

Students pose a question and the 3 possible responses: *Which is your favorite flavor of ice cream? Chocolate, vanilla or strawberry?* Students collect their data by using tallies or another way of keeping track. Students organize their data by totaling each category in a chart or table. Picture and bar graphs are introduced in 2nd Grade.

What is your favorite flavor of ice cream?	
Chocolate	12
Vanilla	5
Strawberry	6

Students interpret the data by comparing categories.

Examples of comparisons:

- What does the data tell us? Does it answer our question?
- More people like chocolate than the other two flavors.
- Only 5 people liked vanilla.
- Six people liked Strawberry.
- 7 more people liked Chocolate than Vanilla.
- The number of people that liked Vanilla was 1 less than the number of people who liked Strawberry.
- The number of people who liked either Vanilla or Strawberry was 1 less than the number of people who liked chocolate.
- 23 people answered this question.

Thank you in advance for all you do to support your child! O

The First Grade Team