# 1ˢᵗ Grade Unit 9 Mathematics

Dear Parents,

The Mathematics Georgia Standards of Excellence (MGSE), present a balanced approach to mathematics that stresses understanding, fluency, and real world application equally.  Know that your child is not learning math the way many of us did in school, so hopefully being more informed about this curriculum will assist you when you help your child at home.

Below you will find the standards from Unit Nine in bold print and underlined.  Following each standard is an explanation with student examples.  Please contact your child's teacher if you have any questions.

**Fayette County NBT.7  Identify dimes, and understand ten pennies can be thought of as a dime. (Use dimes as manipulatives in multiple mathematical contexts.)**

This standard asks students to work in a variety of opportunities with dimes and pennies daily. Ideas include (but are not limited to):
• Coin rubbings to help identify pennies and dimes.
• Using the date as a sum of coins by amount and asking what combination of coins could equal today's date. Example: September 14, "What combinations of pennies and dimes could equal 14 cents?"
• Using dimes and pennies as manipulatives.

**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?

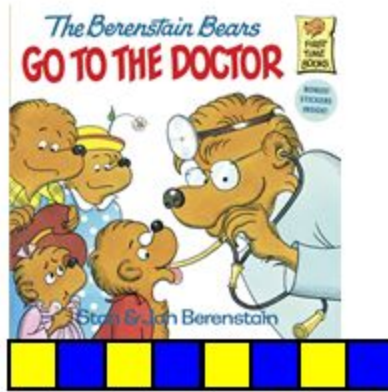| **Student 1:** | **Student 2:** |
|---|---|
| I used a pencil to measure the height of the bookshelf, and it was 6 pencils tall.  I used the same pencil to measure the height of the desk, and the desk was 4 pencils tall.  So, the bookshelf is taller than the desk. | I used a book to measure the height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

**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._**

This standard asks students to use multiple copies of the same 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 wide is this book in color tiles?  (Student: The book is about 7 tiles wide.  Eight tiles is too many.

## 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 then orally tell and write the time. Times should be limited to the hour and the half-hour. Students need experiences exploring the idea that when the time is at the half-hour the hour hand is between two numbers and not directly on a number.

Example:

What time is shown on the clock below?

Student: The hour hand is between the 3 and 4, but the hour is 3 since it is not yet on the 4. The minute hand is on the 6 – halfway around the clock. The time is 3:30.



## 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 calls for students to work with collected data (in up to 3 categories). Students should able to pose and answer questions about the data.

Example:

*Which is your favorite flavor of ice cream? Chocolate, vanilla or strawberry?* Students then ask and answer questions and make observations about the collected data in the table.

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

Examples:
- What does the data tell us?
- More people like chocolate than the other two flavors.
- Only 5 people liked vanilla.
- Six people liked strawberry.
- How many more liked chocolate than vanilla?
- How many more liked strawberry than vanilla?
- How many people answered the question in the survey?

## Fayette County MD.5 Create and interpret picture graphs, tally charts, tables, and bar graphs.

This standard calls for students to make graphs, charts, and tables from given data (with up to 3 categories). Students should also be able to take data from one graph, chart, or table and create a different representation for the same data.

Example:
- The student should be able to take the data from the above table about favorite ice cream flavors and create a bar graph showing the same data.
- The student should be able to take the data from a picture graph and create a tally chart about the data.

## Fayette County MD.6 Count money up to 100 cents (like coins only) and write the amount using the cent symbol.

Although this standard calls for students to count coins up to 100 cents, this is a year-long process. In this unit, students will count only dimes to 100 cents, applying their knowledge of skip counting. As the year progresses, students will count different coins, but not mixed.

Example:
When given a group of dimes, students should be able to tell the value of the group of dimes and write that value using a cent symbol (not using decimal notation).