**3rd Grade Unit 1 Mathematics**

Dear Parents,

The Common Core State Standards (CCSS), also known in Georgia as the Common Core Georgia Performance Standards (CCGPS), 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 One 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.

**MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.***

Students should have opportunities reading, interpreting, and solving problems using scaled graphs before being asked to create one from given data. The following graphs all use five as the scale interval, but students should experience different intervals (such as two and ten) to further develop their understanding of scaled graphs and number facts. Students should be graphing and interpreting data that is relevant to their lives

Example:

* **Pose a question:** What types of books do the students in our class read?
* **Collect and organize data:** Take a student survey.

Picture graphs: Scaled picture graphs include symbols that represent multiple units. Graphs should include a title, categories, category labels, key, and data.

|  |  |
| --- | --- |
| **Types of Books Read** | |
| Nonfiction | Description: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNG |
| Fiction | Description: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNGDescription: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNG |
| Description: Description: C:\Users\lynn.skinner.COWETASCHOOLS.000\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\3FHYUBLY\MC900432645[1].PNG | = 5 books |

Single Bar Graphs: Students use both horizontal and vertical bar graphs. Bar graphs include a title, scale, scale label, categories, category labels, and data.

* **Analyze and Interpret data:** For all types of graphs, charts, and tables, students should answer interpretive questions.

Students should answer questions such as:

* How many more nonfiction books were read than fiction books?
* Did more people read biography and mystery books or fiction and fantasy books?
* About how many books in all genres were read?
* Using the data from the graphs, what type of book was read more often than a mystery but less often than a fairytale?
* What interval was used for this scale?
* What can we say about types of books read?
* If you were to purchase a book for the class library which would be the best genre? Why?

**Fayette County MD.9 Create and interpret Venn diagrams.**

This standard calls for students to use Venn diagrams as a graphic organizer for studying data. Students should be able to display, interpret, and solve one- and two-step problems involving given data in a Venn diagram.

Ken

Sue

Jill

Ben

Joe

Tom

Zoe

**Cat**

**Dog**

Liz

Example:

* Data was collected from third graders about whether they had a dog, a cat, or both a dog and a cat for pets. The Venn at the right shows the results.
* Students should answer questions like the following about the data:
  + - How many students have both a cat and a dog for pets?
    - How many students have a dog?
    - How many students have a cat?
    - How many more students have a dog than a cat?
    - Why is Ben’s name outside the Venn?
    - Why are Jill and Tom in the overlap section of the Venn?