**3rd Grade Unit 2 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 Two 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.

**NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.**

This standard refers to using place value understanding, which extends beyond an algorithm or procedure, for rounding. This is “rounding by reason” not by “rote”. The expectation is that students have a deep understanding of place value and number sense. We want them to be able to explain and reason about the answers they get when they round. They should have a good understanding of the benchmark numbers that a given number is between and the approximate location (or proximity) of that given number to each of the benchmarks. Students should have numerous experiences using an empty number line as a tool to support their work with rounding.

Example:

* Question: Round 37 to the nearest ten.

Student 1:

I know that 37 is located between 30 and 40. I also know that 35 is halfway between 30 and 40 and that 37 is more than 35. This means that 37 is closer to 40 than 30, so 37 would round to 40.

Student 2:

I know that 37 is located between 30 and 40. I know that it is 7 more than 30 and 3 less than 40, so it is closer to 40. This means that the nearest ten to 37 is 40.

Student 3:

I drew an empty number line.

I thought about the tens that 37 would be between and marked them on my empty number line.

Next, I knew that 37 is a little more than 35, which would be halfway between 30 and 40. I placed 37 on my number line to show this.

Because 37 is closer on the number line to 40 than 30, I know that 37 would round to 40.

**37**

**40**

**30**

**40**

**30**

**NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.**

This standard refers to “fluency”, which means accuracy, efficiency (using a reasonable amount of steps and time), and flexibility (using mental math strategies based on place value or properties). The word algorithm refers to a procedure or a series of steps. There are other algorithms other than the standard algorithm. Third grade students should have experiences with a variety of strategies and algorithms beyond the standard algorithm.

Example: There are 178 fourth graders and 225 fifth graders on the playground. What is the total number of students on the playground?

**Student 4—**

**Empty Number Line**

178 + 225 = ?

178 + 200 = 378

378 + 20 = 398

398 + 5 = 403

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| --- | --- | --- | --- | --- |
| **Student 1—**  **Place Value Strategy**  100 + 200 = 300  70 + 20 = 90  8 + 5 = 13  300+90+13 = 403 students |  | **Student 2—Properties**  178 is close to the friendly number 180, so I took 2 from the 225. I now have 180 + 223 which is easier to add.  180 + 200 = 380  380 + 20 = 400  400 + 3 = 403 students |  | **Student 3—Place Value**  I know that 225 is  200 + 20 + 5  178 + 200 = 378  378 + 20 = 398  Then 398 + 5 is 403 students. |

**403**

**178**

**378**

**398**

**+200**

**+20**

**+5**