Math Parent Letter

Welcome back! We hope you had a fun and restful summer. We are so excited to begin a new year, and see your child's mathematical knowledge grow. This newsletter is designed to give parents and students a better understanding of the math concepts found in the **Georgia Standards of Excellence**. We look forward to teaching your child and helping them master these standards.
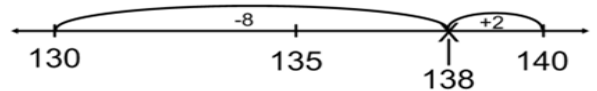
UNIT 1: WE WILL BE ABLE TO

➢ Use a number line as a tool to round whole numbers to the nearest 10 or 100.

➢ Add and subtract numbers within 1000 using place value strategies, properties of operations, and the relationship between addition and subtraction. Solve two-step word problems using addition and subtraction.

➢ Tell and write time to the nearest minute.

➢ Draw a scaled picture graph and a scaled bar graph to represent a data set.
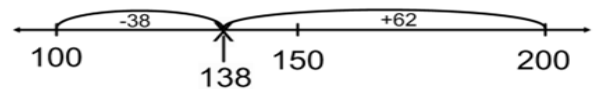
Unit 1: Place Value - Ones to Ten Thousands

Students will use a number line to round a number to the nearest 10 or 100. In the following examples, we use a number line to round 138 and 163 to the nearest 10 and 100.
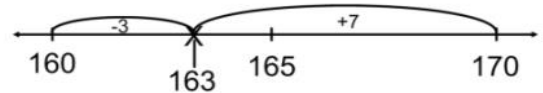

138 rounding to the nearest 10

138 is closer to 140, than 130.

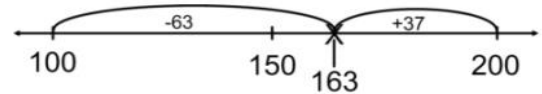138 rounding to the nearest 100
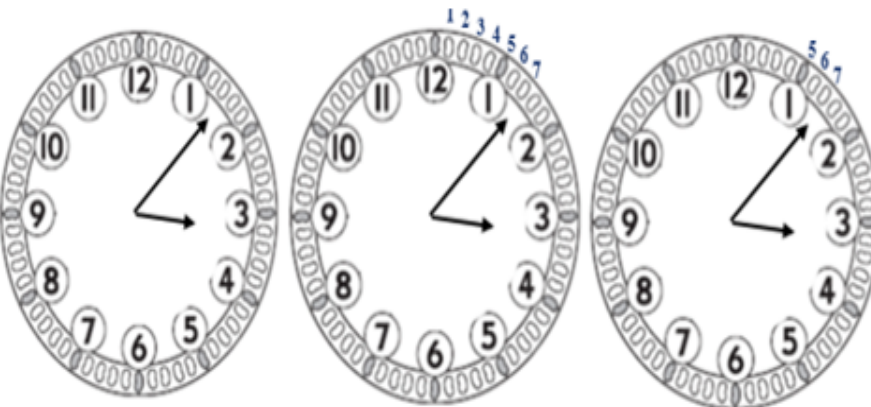
163 rounding to the nearest 10

163 is closer to 160, than 170.

163 rounding to the nearest 100

163 is closer to 200, than 100.

Students practice telling time to the nearest minute using a clock face with each minute clearly represented.
On the clock face below, each minute is represented by a bean. Students can count the number of beans to find the time to the nearest minute or they may use prior knowledge and count from the nearest five minutes to find the time to the nearest minute.
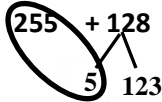

In this example, students can count the beans starting after the bean above the 12 and stop counting at the minute hand. Students should count seven beans (minutes) and know the time is seven minutes after three.
Students may also use prior knowledge from 2nd grade. Starting at 5 minutes and counting on 6, 7 to also find seven minutes past three.

Students will use a variety of strategies and written methods to add and subtract numbers within 1000.

Below are examples of some of the strategies and written methods students may use to solve 255 + 128.

Students may use the <u>Make Ten Strategy</u> to get started solving this problem.

One of the possible ways to show using the make ten strategy is to show how one of the numbers should be decomposed in order to make a ten. Below a student has used a number bond to show the decomposition of 128.

255 + 128
5   123

The student combines 255 and 5 to make 260.

255 + 5 = 260

Next, the student combines 260 and 123 to make 383.

260 + 123 = 383

So 255 + 128 = 383

Students may use <u>place value understanding</u> to solve this problem. They will start by keeping one of the addends whole. Decomposing the other addend into place value.

255 + (100 + 20 + 8)

255 + 100 = 355 (adding hundreds to the number)

355 + 20 = 375 (adding tens to the number)

375 + 8 = 383 (adding ones to the number; here
5 3   students may use the make ten strategy to mentally add the numbers.)

Think Mentally:
375 + 5 = 380
380 + 3 = 383

So 255 + 128 = 383

Students may use the arrow method to show their thinking for this problem. Usually their thinking is "mental math".
They use the arrow method to jot down their thinking to keep up with their mental computation.

So 255 + 128 = 383

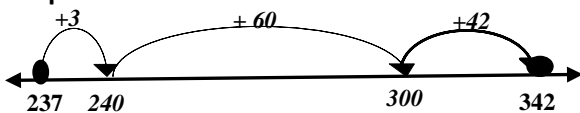255 $\xrightarrow{+100}$ 355 $\xrightarrow{+20}$ 375 $\xrightarrow{+5}$ 380 $\xrightarrow{+3}$ 383

Below are examples of some of the strategies and written methods students may use to solve 342 - 237.

Students may use the <u>Adding-Up Strategy</u> on an open number line.

The open number line allows the students to place both numbers from the problem on the number line. The students understand they are finding the difference or distance between the two numbers.

First Step:

237   342

After the open number line is set up, students can add-up to see how far it is from 237 to 342.

+3   + 60   +42

237   240   300   342

Next, they will mentally combine the numbers used to add up (3 + 60 + 42 = 105). So 342 - 237 = 105

Students may use <u>place value understanding</u> to solve this problem. They will start by keeping one of the addends whole. Decomposing the other addend into place value.

342- (200 + 30 + 7)

342 - 200 = 142 (subtracting hundreds from the number)

142 - 30 = 112 (subtracting tens from the number)

112 - 7 = 105 (subtracting 2 ones first to get back to a ten
2 5   and then subtracting 5 more ones)

Think Mentally:
112 - 2 = 110
110 - 5 = 105

So 342 - 237 = 105

Many students solve subtraction problems by using the <u>Adding-Up Strategy</u>.

The students understand they are finding the difference or distance between the two numbers.

Students may use the arrow method to show their thinking for this problem. Usually their thinking is "mental math".

They use the arrow method to jot down their thinking to keep up with their mental computation.

They will start with 237 keeping in mind they are finding how far it is to **342.**

237 $\xrightarrow{+3}$ 240 $\xrightarrow{+60}$ 300 $\xrightarrow{+42}$ 342

Next, they will mentally combine the numbers used to add up (3 + 60 + 42 = 105). So 342 - 237 = 105