# Unit Name: Addition & Subtraction (Quarter 1)

#### **Common Core State Standards:**

- **2.OA.2** Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
- **2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.
- **2.0A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

## **Essential Vocabulary:**

- add
- subtract
- more
- less (fewer)
- equal
- equation
- put together
- take from
- take apart
- addend
- compare
- unknown
- sum (total)
- doubles

#### **Unit Overview:**

In the first part of the unit, students will build upon their work in First Grade by using various addition and subtraction strategies in order to fluently add and subtract within 20.

In the second part of the unit, students extend their work with addition and subtraction by solving a variety of word problems in two major ways. First, they represent and solve word problems within 100, building upon their previous work to 20. In addition, they represent and solve one and two-step word problems of all three types (Result Unknown, Change Unknown, Start Unknown). Rather than a letter ("n"), boxes or pictures are used to represent the unknown number. For a list of story problem types, please click the link to the NCDPI Unpacking Document, which is located in the additional resources section.

Throughout this unit, second graders are expected to explain why addition or subtraction strategies work. They may use drawings or objects to support their explanation. Second Graders are not expected to use the formal algorithm at this time. The focus is on developing and strengthening their conceptual understanding.

# Strategies/Skills:

Second Graders internalize facts and develop fluency by repeatedly using mental strategies that make sense to them.

- Counting on
- Making ten

- Creating an easier problem using known sums
- Using the relationship between addition and subtraction
- Using doubles

In addition, students can explain why addition and subtraction strategies work by using drawings or objects to support their explanation.

- Using a number line to add or subtract
- Using a hundreds board to add or subtract

## **Video Support:**

Video support can be found on The WCPSS Academics YouTube Channel.

- http://tinyurl.com/WCPSSAcademicsYouTube
  - o ES 2 Math Mental Strategy-Counting on
  - o ES 2 Math Mental Strategy-Making ten
  - o ES 2 Math Mental Strategy- Creating an easier problem
  - o ES 2 Math Mental Strategy-Using the relationship between addition and subtraction
  - o ES 2 Math Mental Strategy-Using doubles
  - o ES 2 Math Using a number line to add or subtract
  - o ES 2 Math Using a hundreds board to add or subtract

#### **Additional Resources:**

If you have limited/no internet access, please contact your child's teacher for hard copies of the resources listed in this document.

• NCDPI Unpacking Document: 2<sup>nd</sup> Grade Unpacking Document