# **Chapter 3- Basic Facts and Relationships**

Content Area: Mathematics
Course(s): Math 2
Time Period: November
Length: 21 Days
Status: Published

#### **Unit Summary**

In this unit, students will use doubles facts, practice addition facts, make a ten to add, add 3 addends together, learn about the inverse relationship of addition and subtraction, practice subtraction facts, use ten to subtract, use drawings and equations to represent problems, solve problems using equal groups, and write equations using repeated addition to solve arrays.

#### **Standards**

MA.2.OA.A.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.			
MA.2.OA.B.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.			
MA.2.OA.C.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.			
CRP.K-12.CRP2	Apply appropriate academic and technical skills.			
CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.			
TECH.8.1.2.A.CS1	Understand and use technology systems.			

# **Student Learning Objectives**

Students will be learn to...

- Use doubles facts as a strategy for finding sums for near doubles facts.
- Recall sums for basic facts using properties and strategies.
- Recall sums for addition facts using the make a ten strategy
- Find sums of three addends by applying the Commutative and Associative Properties of Addition.
- Use the inverse relationship of addition and subtraction to recall basic facts.
- Recall differences for basic facts using mental strategies.
- Find differences on a number line to develop the mental strategy of decomposing to simplify facts.
- Use bar models to represent a variety of addition and subtraction situations.
- Write equations to represent and solve a variety of addition and subtraction situations.
- Solve problems involving equal groups by using the strategy act it out.
- Write equations using repeated addition to find the total number of objects in arrays.

## **Essential Questions**

- How can you use patterns and strategies to find sums and differences for basic facts?
- How can you use doubles facts to find sums for near doubles facts?
- What are some ways to remember sums?
- How is the make a ten strategy used to find sums?
- How do you add three numbers?
- How are addition and subtraction related?
- What are some ways to remember differences?
- How does getting to 10 in subtraction help when finding differences?
- How are bar models used to show addition and subtraction problems?
- How are number sentences used to show addition and subtraction situations?
- How can acting it out help when solving a problem about equal groups?
- How can you write an addition sentence for problems with equal groups?

## **Enduring Understandings**

Students will understand that...

• you use patterns and strategies to find sums and differences for basic facts.

## **Application**

Students will be able to independently use their learning to...

utilize patterns and strategies to find sums and differences for basic facts.

#### **Skills**

Students will be skilled at...

- Using double facts.
- Practicing addition facts.
- Making a ten to add.
- Adding three addends.
- Relating addition and subtraction.
- Practicing subtraction facts.
- Using ten to subtract.
- Using drawings to represent problems.
- Using equations rto represent problems.
- Problem solving equal groups.
- Using repeated addition.