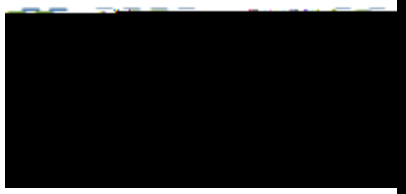
3rd

Suggestions for Parental Involvement/Support

Addition Strategies:
Addition by Place Value
Once students understand place value, this is one of the first strategies they utilize. Each addend is broken into expanded form and like place values are combined. When combining quantities, children can work from left to right because the magnitude of the numbers is not changed.

23 + 48



Or using the partial sums algorithm:

23
+48
60
+11
71

Or using equations:
20 + 40 = 60
3 + 8 = 11
60 + 11 = 71

Adding One Numbers in Parts
Students begin with one of the addends and add up using numerical relationships such as tens and ones, make ten facts or landmark numbers.

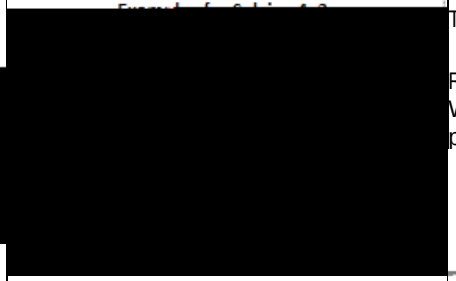
23 + 48

Show your thinking using picures:

Or using a number line:

Or using equations:
23 + 10 + 10 + 10 + 10 = 63
63 + 7 = 70 70 + 1= 71

Multiplication:
In our first multiplication unit, students will develop an understanding of when and how to use multiplication. Multiplication is used when we need to combine many equal groups. There are a variety of strategies students will be learning about to help them combine these groups until they have memorized all their multiplication facts.



Commutative Property
4X3 has the same product as 3X4. If I already know 3X4, then I also know 4X3.
Distributive Property
Decompose one of the factors in a multiplication problem into easier parts then multiply and combine the parts.

Fact Fluency:
By the end of 3rd grade, students will be expected to know the basic facts up to 10X10. Until we can get those facts known, students will be encouraged to use mental math and the distributive property to solve facts they are still working on. See above example.
To help your child learn their facts, ask your child questions such as the following:

- Which factor could you break down into easier parts?
- Which two or three facts can we focus on this week?

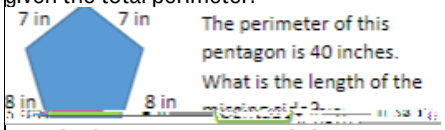
Fractions:
In 3rd grade, students will continue their understanding of fractions to include fractions of a whole, fractions of a number line, and fractions of a set of objects.
One way 3rd grade students determine the name of a fraction is counting by unit fractions. This strategy is also helpful to learn the fractional sequence so they can label number lines.

Think: – , – , – or – , – , 1 whole

Reasoning about Fractions:
Which fraction has a smaller shaded piece? Explain your thinking.

Equivalent Fractions:
Students will explore the relationship between thirds and sixths, and halves, fourths, and eighths.

Perimeter and Area:
Perimeter is the measurement around an object. Students can add all the side lengths to find perimeter. They will also calculate missing lengths of sides when given the total perimeter.

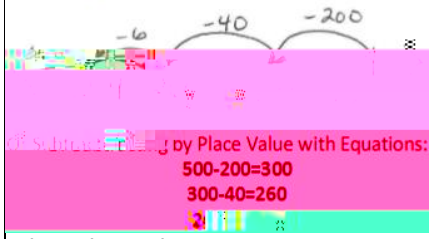


Area is the measurement of the space inside a 2D shape. Students will begin by using square tiles to cover the inside of a shape and then move to length X width. They will also decompose an irregular shape into smaller shapes and add the areas of both together to find the total area.

Subtraction Strategies:
Adding Up
Since addition and subtraction are related, many students prefer to add up rather than subtract. This is an appropriate strategy because it uses a skill most students are strong in (addition) and most students are less likely to make mistakes.

500 - 246 = 254 1,000 - 734 = 266

Subtracting by Place Value
Once students are comfortable skip counting forward and backward by 10s, subtracting by place value becomes a natural mental strategy. In this strategy, students decompose the second number into its expanded form and then subtract it in parts.
500-246 =_____



Subtracting Back
In the subtracting back strategy, students can decompose the number that is being subtracted in any way that makes the problem easier to solve. Students typically choose to use landmark numbers (multiples of ten) or basic fact computations that they are comfortable with. See below.