

MATH NEWS



Volume 2

1st Grade Math

2nd 9 Weeks-Unit 2

UNIT 2 GOALS

- Count, write, and read numbers 0-120.
- Represent numbers 0-120 in groups of tens & ones.
- Fluently add and subtract up to 10.
- Add and subtract numbers up to 20.
- Solve addition and subtraction word problems to 20.
- Addition of three numbers up to 20.
- Relate subtraction to addition.
- Understand and use math symbols (+, -, =).
- Determine if an equation is true or false.
- Solve for unknown number in equations ($5 + \underline{\quad} = 12$; $\underline{\quad} - 8 = 4$)
- Use strategies to add and subtract (see examples below).



Strategies to Use:

1. Use counting when adding or subtracting.
2. Use doubles, doubles plus 1 or doubles minus 1.
3. Use Think Addition to solve subtraction.
4. Look for combinations of ten.
5. Make a ten.
6. Decompose a number leading to a ten.

Words to Know:

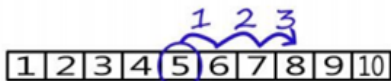
Compose – To put together. i.e. 8 and 1 is 9 or 5 and 7 is 12.

Decompose – Breaking a number apart. i.e. 7 can be decomposed into 6 and 1; 5 and 2; 4 and 3.

Addend – A number in an addition problem. i.e. $5 + 3 = 8$; 5 and 3 are addends. 8 is the sum of the addends 5 and 3.

1. Use counting when adding or subtracting:

- **Counting On:** Students start with a number and count on. For example, if the problem is $5 + 2$, students start with 5 and count 5, 6, 7. So $5 + 2 = 7$.
- **Counting Back:** Students start with a number and count backwards. If the problem is $5 - 2$, students start with 5 and count back 5, 4, 3. So $5 - 2 = 3$.
- **Counting Up to Subtract:** Students start with a number being subtracted and count up to the number from which it is being subtracted. For example, for the problem $8 - 5$, students can count 6, 7, 8. So $8 - 5 = 3$.



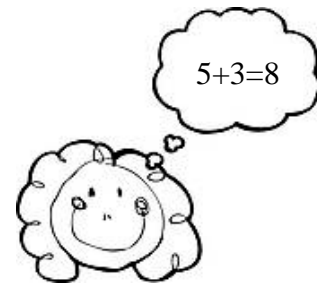
2. Use doubles and doubles plus or minus 1:

- **Doubles:** When two addends are the same, such as $3 + 3$ or $8 + 8$.
- **Doubles Plus One:** Where one addend is one more than the other, students use the doubles fact of the smaller addend to solve the problem. Such as $7 + 8$. Think: $7 + 7 + 1 = 14 + 1 = 15$.
- **Doubles Minus One:** Where one addend is one more than the other, students use the doubles fact of the larger addend to solve the problem. Such as $7 + 8$. Think: $8 + 8 - 1 = 16 - 1 = 15$.

3. Using Think Addition to solve subtraction:

Students think of the related addition fact when presented with a subtraction problem.

Example:
 $8 - 5 = \underline{\quad}$



I know $5 + 3 = 8$, so $8 - 5 = \underline{3}$.

Ask your child, "What strategy did you use?" Expect them to be able to explain their thinking.

4. Looking for combinations of ten:

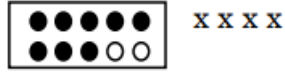
When presented with a problem, students notice numbers that make a "friendly" ten.

$$8 + 2 + 4 = \underline{\quad}$$

I know $8 + 2 = 10$. Then I add $10 + 4$.

$$\text{So } 8 + 2 + 4 = 14.$$

$$\begin{array}{c} 10 \\ \swarrow \quad \searrow \\ (8) \quad (2) \end{array} + 4 = 14$$



5. Make a Ten:

$9 + 6 = \underline{\quad}$ I know $9 + 1 = 10$. I can take 1 from the 6. Now it is just 5.

$$9 + 6 = 15$$



$9 + 1 = 10$. Now I have $10 + 5$.

$$10 + 5 = 15, \text{ so } 9 + 6 = 15.$$

6. Decomposing a number leading to a ten:

$$15 - 8 = \underline{\quad}$$

I know 8 can be decomposed into 5 and 3.

I can easily take 5 from 15. $15 - 5 = 10$

Now I have $10 - 3$.
 $10 - 3 = 7$, so $15 - 8 = 7$.

Students will count, read, and write numbers to 120.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |

Word Problems

Students will continue to solve a variety of addition and subtraction situations. In this unit, we will be focusing on story problems using numbers up to 20.

Examples:

John has 14 fish. Sally has 6 fish. How many more fish does John have than Sally?

$$14 - 6 = \underline{\quad}$$

John has more fish than Sally.

John has 14 fish. Sally has some fish. Together they have 20 fish. How many fish does Sally have?

$$14 + \underline{\quad} = 20$$

Sally has fish.

John has some fish. Sally has 6 fish. Together they have 20 fish. How many fish does John have?

$$\underline{\quad} + 6 = 20$$

John has fish.

John has 4 fish. Sally has 7 fish. Michael has 6 fish. If the 3 friends put all of their fish in the same bucket, how many fish are in the bucket?

$$4 + 7 + 6 = \underline{\quad}$$

There are fish in the bucket.

Understanding the Meaning of the Equal Sign & Determine if Equations are True or False

True

$$9 + 2 = 5 + 6$$

$$8 - 6 = 5 - 3$$

$$8 - 5 = 3 + 0$$

False

$$9 + 2 = 5 + 5$$

$$8 - 6 = 5 - 4$$

$$8 - 4 = 4 + 1$$