


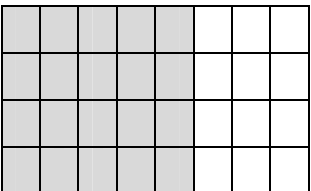


About the Mathematics in This Unit

Dear Family,

Our class is starting a new unit in math about multiplication, *Multiplying Whole Numbers*. During this unit, students develop an understanding of multiplication as repeated addition and apply multiplication in problem solving. By the end of Grade 3, it is expected that students will know and use multiplication combinations with products to 100.

Throughout the unit, students work toward the following goals:

| Benchmark/Goals | Examples |
|--|---|
| Recognize multiplication as repeated addition. | There are 4 cyclists riding together. How many bicycle tires are there in all? $2 + 2 + 2 + 2 = 8$ $4 \times 2 = 8$ |
| Demonstrate an understanding of multiplication as a combination of equal groups. | Here are 3 stars. Each star has 5 points. There are 15 points in all.  $3 \times 5 = 15$ |
| Use arrays and the distributive property to solve multiplication problems. |  $4 \times 8 = (4 \times 5) + (4 \times 3)$ $4 \times 8 = 20 + 12$ $4 \times 8 = 32$ |
| Understand the effect of multiplying by multiples of 10. | $3 \times 10 = 30$ $3 \times 100 = 300$ $3 \times 1,000 = 3,000$ |

| Benchmark/Goals | Examples |
|--|---|
| Apply the properties of multiplication. | $6 \times 8 = 8 \times 6$ $1 \times _ = _$ $0 \times _ = 0$ $(2 \times 7) \times 9 = 2 \times (7 \times 9)$ |
| Solve multiplication problems using mental math and estimation strategies. | <p>Ms. Wilson's class is counting around the class by 4s. What number with the 8th student say?</p> <p>Skip counting: 4, 8, 12, 16, 20, 24, 28, 32</p> <p>Math facts: $4 \times 8 = 32$</p> |

In our math class, students spend time discussing problems in depth and are asked to share their reasoning and solutions. It is most important that children accurately and efficiently solve math problems in ways that make sense to them. At home, encourage your child to learn their multiplication facts and explain his or her math reasoning to you.

In addition to the on-level skills, students in the advanced unit will also solve multiple step problems, multiply 2 and 3 digit numbers by 2 digit numbers, and will relate their knowledge of multiplication through project-based applications.

Please look for more information and activities about *Multiplying Whole Numbers* that will be sent home in the coming weeks.

Sincerely,
The Third Grade Team