

March 2008

Dear Families,

First graders are continuing to discover the structure of numbers. They have learned that numbers can be decomposed into smaller numbers (subtraction) or combined to create larger numbers (addition). Currently they are developing and practicing strategies for addition facts. They will work on subtraction facts after spring break.

Basic facts can be most easily mastered through strategies rather than through memorizing the addends for each sum or number pairs for each difference. In kindergarten children built on their knowledge of counting as a first step in the development of fact strategies. They used concrete materials and combined numbers by “counting all” the objects in the sets. Now your first grader is practicing more sophisticated strategies. Some first graders deduce these strategies on their own and others need systematic instruction.

Addition Strategies

Counting On (+1, +2)

Doubles (6+6)

Near Doubles (5+6)

Making Ten (8+2)

Adding Ten (3+10)

Subtraction Strategies

Count Back (-1, -2, -3 from larger number)

Count Up (+1, +2, +3 from smaller number)

Fact Families (Relate to addition: $5+4=9$, $4+5=9$, $9-5=4$, $9-4=5$)

Subtract from Ten (10-5, 10-4)

Ten Between (17-7, 16-6)

Patterns (Example: Any number minus itself is always 0.)

Our math program gives first graders many opportunities to develop meaning for the operations of addition and subtraction through a rich variety of problem solving situations. They have opportunity to explain their reasoning and reflect on their evolving knowledge of concepts and strategies. In addition to carefully sequenced hands-on investigations, children play mathematical games in which they combine and compare numbers. They also have regular facts checks based on strategies.

Please don't hesitate to contact us if you have further questions about how addition and subtraction are taught in first grade.

Sincerely,

First Grade Team

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