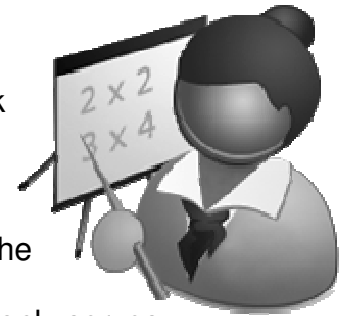


Number Talks

Grades K-2



Of all the things I have seen so far for math, I think that a Number Talk will give you the most “bang for your buck.” In other words, you can get big results with a small amount of time. A Number Talk is a whole group activity that takes 5-10 minutes. It can be done at the beginning of the math lesson, or during some other time of the day. The purpose of a Number Talk is to help students develop computational fluency as well as number sense. During a Number Talk, the teacher only serves as a recorder and facilitator, not as a teacher. 😊

Conducting a Number Talk

- In Kindergarten and at the beginning of first grade, use pictures or models such as ten frames....your questions can simply be “How many?” The problem may also be $8 + 7$. Students should also be given the option of using manipulatives to solve the problems.
- Ask for 4-5 answers and write them down whether they are right or wrong. When you first start, you may consider just having students share answers without writing them down, especially in Kindergarten.
- Ask for explanations for the process of solving and write them down. Write exactly what the student says and ask for clarification. In the beginning, especially in Kindergarten, you may not want to write everything down, but rather focus on the “math discussion.” Be sure to repeat back what the child has said so he feels heard.
- Ask students what mistakes they made.
- Give the same response to each student whether they are right or wrong. Give the same response for each strategy. You do not want students coming up with “crazy” ways to solve a problem just to impress you. 😊 You also don’t want students to worry about being wrong.
- Keep the conversation moving so that you don’t “lose” kids.
- At the end of first grade and in second grade, when doing subtraction, start with multiples of ten.... $20-8$ or $20-12$.
- Students will *surprise* you by what they can do when allowed to use their own methods! LD and HA students like this activity because they can think in ways that make sense to them!
- At the end of first grade and the beginning of second grade, you can give students regrouping problems to solve without showing them the algorithm. Remember that there is more than one way to solve a problem. Many kids can solve these problems by just using their number sense. 😊
- This activity also models for students how to “show their work.” Students need to be able to explain a process verbally before they can write it down.

Ideas for Number Talks

When doing Number Talks, try to rotate what you do to keep it interesting. At times it may feel repetitive to you, but if the students are engaged, it is appropriate.

Kindergarten

- ❑ Dots (Back of Book 1 of *Developing Number Concepts* by Kathy Richardson and from the blackline masters found at www.ablongman.com/vandewalleseries)
- ❑ Lines pictures from *Developing Number Concepts* by Kathy Richardson
- ❑ Number Shapes from *Developing Number Concepts* by Kathy Richardson
- ❑ Dominoes
- ❑ Large Dice
- ❑ Unifix trains with two colors
- ❑ Pictures from *Early Skillboards* by Marcy Cook
- ❑ Pictures from *Look and Show Your Thinking* by Marcy Cook
- ❑ Ten Frames (blackline masters found at www.ablongman.com/vandewalleseries)
- ❑ Greg Tang books
- ❑ *Number Talks* by Sherry Parrish
- ❑ Other:

First Grade

- ❑ Dots (Back of Book 1 of *Developing Number Concepts* by Kathy Richardson and from the blackline masters found at www.ablongman.com/vandewalleseries)
- ❑ Lines pictures from *Developing Number Concepts* by Kathy Richardson
- ❑ Number Shapes from *Developing Number Concepts* by Kathy Richardson
- ❑ Dominoes
- ❑ Large Dice
- ❑ Unifix trains with two colors
- ❑ Pictures from *Early Skillboards* by Marcy Cook
- ❑ Pictures from *Look and Show Your Thinking* by Marcy Cook
- ❑ Ten Frames (blackline masters found at www.ablongman.com/vandewalleseries)
- ❑ Greg Tang books
- ❑ Addition Facts
- ❑ Subtraction Facts
- ❑ Add a 2-digit number and a single digit number ($15 + 6$) – End of year

From Lori Hochstetler, Middlebury Community Schools

First Grade (continued)

- ❑ Subtract a single digit from a multiple of ten ($20 - 4$) – End of year
- ❑ Money (How much is 2 quarters and a dime?)
- ❑ *Number Talks* by Sherry Parrish
- ❑ Other:

- ❑ Second Grade
- ❑ Pictures from *Early Skillboards* by Marcy Cook
- ❑ Pictures from *Look and Show Your Thinking* by Marcy Cook
- ❑ Ten Frames (blackline masters found at www.ablongman.com/vandewalleseries)
- ❑ Greg Tang books
- ❑ Addition Facts
- ❑ Subtraction Facts

***Note:** When showing addition and subtraction problems, write them horizontally so that students are not constrained by algorithms.

- ❑ Add a 2-digit number and a single digit number ($15 + 6$)
- ❑ Subtract a single digit from a multiple of ten ($20 - 4$)
- ❑ Subtract a single digit from a 2-digit number ($22 - 6$)
- ❑ Add two 2-digit numbers with and without regrouping ($23 + 28$) – This should be done both before and after teaching the algorithm.
- ❑ Subtract two 2-digit numbers with and without regrouping ($32 - 18$) – This should be done both before and after teaching the algorithm.
- ❑ Money (How much is 2 quarters and 6 dimes?)
- ❑ Subtracting numbers from 100 ($100 - 24$)
- ❑ Adding numbers to 99 or 98 ($98 + 34$)
- ❑ *Number Talks* by Sherry Parrish
- ❑ Other: