**Number Talks**

Standards Addressed by these Number Talks:

* 4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm

Pose these number sentences to students and ask them to solve them mentally. The student’s role is to demonstrate fluent strategies for solving these problems using place value, properties of operations, and/or the relationship between addition and subtraction. The teacher’s role is to pose the problem, give students a few minutes to solve the problems and then lead a discussion about how they solved the problems. Teachers will need to write down students’ thinking using number sentences that will show how students used place value, the properties of operations, and or the relationship between addition and subtraction. You need not pose all at once, but instead do a few each week during the unit (posing one problem in one setting). Conversations may range from 10-20 minutes in length. See the article *Number Talks Build Numerical Reasoning (***October 2011 •** teaching children mathematics) for more information.

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| **Number Talks for Addition** | **Number Talks for Subtraction** |
| 25 + 70  125 + 70  154 + 100  154 + 300  154 + 350  334 + 111  216 + 127  156 + 85  158 + 221  115 + 283  111 + 999  222 + 888  333 + 777  444 + 777  340 + 295  999 + 999  998 + 999  998 + 998 | 61-29  62-30  58 -26  48 - 16  80 – 35  79 – 34  80 - 69  81 – 36  88 – 42  100 – 51  99 – 50  236 – 119  200- 147  267 – 118  500 – 249  425 – 149  1000- 399  1000- 571 |

When organizing student work for sharing, look for work that fits in these categories (see examples below) in order to expose students to all strategies explicitly stated in the standard.

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| **Number Talk Problem** | **Solved Using Place Value** | **Solved using Properties of Operations** | **Solved Using the Relationship between Addition and Subtraction** |
| 999 + 999 | 900 + 900 = 1800  90 + 90 = 180  9 + 9 = 18  1800 + 180 + 18 = 1998 | (999 + 1) + (999 + 1)=  1000 + 1000 – 2 = 1998 |  |
| 80 – 69 | 80 – 60 = 20  20 – 9 = 11 | 80 – (69 + 1) = 10  10 + 1 = 11 | 69 + 1 = 70  70 + 10 = 80  10 + 1 = 11 |