

# Mathematical Number Talks

## Number Talks Process

1. Introduce/show problem.
2. Allow students to think about solving the problem in more than one way.
3. Ask students for solutions only.
4. Record all solutions.
5. Ask if anyone can justify one of the answers.
6. Allow students to explain their thinking and how they reached their solution.
7. Record their thinking without adding on so other students can follow the student's thinking.
8. Ask if anyone would like to explain another way to solve the problem.
9. Optional: Ask if anyone would like to justify a different answer.

$$15 \times 4$$

Grade range: 3-8

Fluency Standards: 3+

SMP's: 1, 2, 3, 4, 5, 6, 7, 8

More Problems: 15x5,  
16x4, 12x6, 14x6, 15x40,  
150x4,

Standard Algorithm	Decomposing (15)	Decomposing (4)	Doubling and Halving	Area Model
$\begin{array}{r} 15 \\ \times 4 \\ \hline \end{array}$ <p>5x4=20, Carry the 2 4x1=4, add the 2.</p> <p>15x4=60</p>	<p>15= 10+5</p> <p>10x4=40 5x4=20</p> <p>40+20=60</p> <p>*After decomposing the 15, the 4 is distributed over both 10 and 5.</p>	<p>4= 2+2</p> <p>15x2=30 15x2=30</p> <p>30+30=60</p> <p>*After decomposing the 4, the 15 is distributed over both 2's.</p>	<p>15x2=30 4÷2=2</p> <p>30x2=60</p>	<p>15x4</p> 

