

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.

$$3 + 9$$

Grade range: 1+

Fluency Standards: 1+

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

Similar Problems: 9+3,

4+8, 7+3+1, 5+9, 4+9,

8+2+2

Counting All	Counting On	Decomposing to make Friendly Numbers	Decomposing to use Multiplication	SMP Questions
<p>Student would count all to come up with a solution.</p> <p>●●● ●●●●●●●●</p> <p>12</p> <p>(The dots symbolize 1-1 counting)</p>	<p>Students would put one number "in his/her head" and then count on with the other number.</p> <p>3 ●●●●●●●● = 12 9 ●●● = 12</p> <p>*If students can show both of these options, we could ask, "Which is more efficient?"</p>	<p>Decompose 3 3=2+1</p> <p>9+1=10 10+2=12</p> <p>3+9=10+2=12</p> <p>*Decomposing is one of the most useful strategies students of all ages can learn. This tool is valuable for all operations!</p>	<p>Decompose 9 9=3+3+3</p> <p>3+9=3+(3+3+3)=4x3</p> <p>4x3=12</p>	<p>SMP 1: How can you start this problem? SMP 2: What properties of multiplication could help us in this situation? SMP 3: How can you prove your solution? SMP 4: How could a number line help us? SMP 5: What estimates could help us? SMP 6: How might you show that your solution answers this problem? SMP 7: How can patterns help us solve this problem? SMP 8: Does the strategy that you like the best always work</p>

