Connecting the Dots Between Number Sense and Computational Fluency

Marti Kuntz
Educational Resources Group

Mathematics Consultant
martikuntz@yahoo.com

The role of subitizing, composing, and decomposing with efficiency, flexibility and fluency in the primary Classroom

## Bead abacus construction

Connecting between the abacus and other models
Craft stick bundle games

- Pick three war
- Find the sum or difference
- Role of ten's partners

The role of estimation, the commutative and associative properties in addition and subtraction $37+58=$
$27+15+23$

- The range of reasonableness


## Adding compatibles

| 1 | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- |
| 4 | 3 | 1 | 1 |
| 2 | 0 | 2 | 1 |
| 2 | 1 | 2 | 4 |


| 4 | 6 | 1 | 1 | 3 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 7 | 6 | 5 | 2 | 2 |
| 5 | 4 | 2 | 5 | 4 | 1 |
| 2 | 6 | 2 | 3 | 4 | 8 |
| 3 | 8 | 2 | 6 | 8 | 2 |
| 2 | 1 | 7 | 1 | 4 | 6 |

## Pick a Pair

How did you find them?

$$
\begin{array}{llllll}
9 & 15 & 4 & 18 & 6 & 8
\end{array}
$$

Pick a pair of numbers from above...

1) With a sum less than 20.
2) With a difference of 10 .
3) With a difference of 5
4) With a sum of 10 .
5) With a sum more than 20.

Thoughts, questions, concerns

Thank you for coming to the session!

