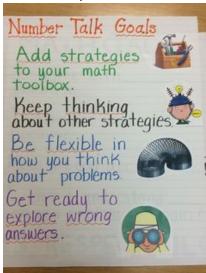
## **Number Talks Action Plan**

# Implementation with Resources

**Part 1**: Elicit thinking from multiple perspectives and the number talk process.

Dot talks are always a good place to start at any grade level. It is okay to continue dot card number talk for more than a day. I would suggest spending a week on it. Go at your pace and meet your students where they are.

Student Expectations Poster:

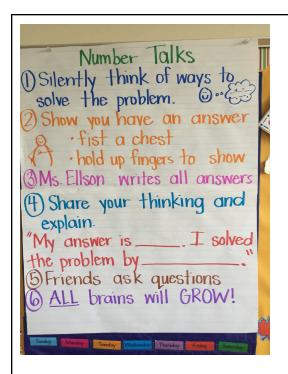


Hand Signals (English and Spanish):



# **Step-by-Step Lesson Instruction**

- 1. Expectations and Hand Signals
- 2. Teacher writes a problem or shows a dot pattern on the board.
- Teacher waits while students solve the problem mentally and put up their thumbs when they have had enough time to think.
  - a. It's not about how fast students do the problem, so giving them time is important. If they finish quickly, encourage students to solve the problem another way.
- 4. Teacher asks if anyone is willing to share what they think the answer is. Record just the answers (wrong or right) on the board and ask if anyone got a different answer, continue recording.
  - a. Several different answer lead to meaningful conversations
- 5. Teacher asks if anyone can explain how he or she figured the problem out.
  - a. Students are explaining why their process makes sense.
  - b. Who has a strategy he or she is willing to share?
  - c. Is anyone willing to convince us that your answer makes sense by telling us what you did?
  - d. **Dot Card Facilitating Questions:** How many dots do you see? How do you see them? How many more make ten?
- When students are sharing their strategies, they first identify which answer they are defending. Teacher annotates/records student thinking while student is talking.
- 7. Questions to ask that help students communicate more clearly or emphasize a particular part of a strategy.
  - a. Does anyone have any questions for ?
  - b. Can you say more about ?
  - c. Can someone explain \_\_\_\_\_'s strategy in your own words?



d. What connections do you notice among the strategies we've discussed?

\*\*\*Repeat until students understand there are multiple strategies to solve a problem or ways to see the number of dots. Do not give an exit slip until you see students are successful during number talk conversations.

# Success criteria:

1. Exit slip: Show two ways you see the dots.

## **Example Anchor Chart**

Part 2: Choose a strategy appropriate for your students. Example: Making Ten Addition Strategy (see additional strategies in part 3)

<u>Suggestion:</u> Depending on your grade level, after dots, continue with addition, subtraction, multiplication and division of whole numbers and then move on to fractions and decimals. Repeat a strategy until the majority of students understand and then give an exit slip.

Number Talk Planning Template Example

Strategy Chart Example:

- Teacher: Plan and Review using the number talks planning template to ensure purposeful instruction.
- 2. Review Student Expectations
  - a. Teacher Focus: accept, respect, and consider all answers.
- Repeat steps from Part 1.

#### **Success Criteria:**

- 1. Exit slip: Show two ways to solve \_\_\_ +\_\_\_
  - Your goal is to see student thinking and assess where students are in their learning.



**Part 3:** Choose the next addition strategy to teach using the resource below.

Number Talk Strategies Table K-5

Number Talk Strategies 3-8

K-2 Resources

3-5 Resources

Repeat the same process.

- Teach Student Expectations (anchor chart)
- 2. Teach Hand Signals (print out)
- 3. Provide students a Dot Card problem (check k-2 resources)
- 4. Teacher provides students an opportunity to solve problems mentally. Students show a visual cue when they are ready with a solution. Students signal if they have solved it in more than one way too. (hand signals)
- 5. Teacher calls for answers. Collect all answers- correct and incorrect- and record answers.
- 6. Students share strategies and justifications
  - a. Teacher Facilitating Questions: **How many dots do you see? How do you see them? How many more make ten?**
- 7. Record student thinking. (anchor chart or whiteboard)
- 8. Pair/Share Option: After sharing answers and strategies, have students pair/share their strategy.
  - a. (clarify their thinking, consider and test other strategies to see if they are mathematically logical, discuss strategies)