

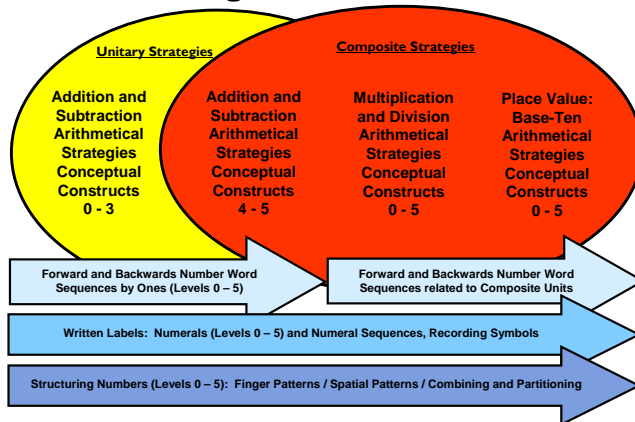
## Using AVMR Data to Differentiate Instruction

You've collected data.  
Now what?

## First Grade Number: What should every student walk away being able to do?

- Use materials to develop strategies to solve +/- problems.
- Combine and Partition numbers 0-10
- ...model join, part-part-whole, separate, and compare situations to demonstrate the meanings of addition and subtraction problems.

## The Learning Framework in Number



## Lesson: 10's Go Fish

- Play the game
- Discuss at your table:
  - Do students easily identify pairs that make 10?
  - How do students decide which card to ask for?
  - How are students using the materials?
  - Are students able to keep track of the cards other players have asked for?
- What SN level does the game target?

## Student Data:

### Structuring Number

Level 0	Level 1	Level 2	Level 3	Level 4
23	29	5	2	1

### Classroom Instructional Framework for Early Number (CIFEN)

Number Words	Numerals	Addition and Subtraction	Structuring Numbers	Place Value	Multiplication and Division
Chapter 3	Chapter 3	Chapters 4 & 6	Chapters 5 & 7	Chapters 8 & 9	Chapter 10
Forward/Backward Number Word Sequences to 10	Numerals to 5	Emergent Counting	Early Spatial Patterns and Finger Patterns		
Forward/Backward Number Word Sequences to 30	Numerals to 10	Perceptual Counting	Facile Structures to 5		Initial Grouping
Forward/Backward Number Word Sequences to 100	Numerals to 20	Figurative Counting	Intermediate Structures to 10		
Forward/Backward Number Word Sequences for Composite Units	Numerals to 100	Initial Number Sequence (Counting-on and Counting-back)	Facile Structures to 10	Tens or Ones	Perceptual Counting in Multiples
Number Word Sequences to 1000 and Beyond	Numerals to 1000 and Beyond	Facile Number Sequence	Intermediate Structures to 20	Tens and Ones with Materials (Jump &/or Split)	Figurative Composite Grouping
			Facile Structures to 20	Tens and Ones without Materials (Jump &/or Split)	Repeated Abstract Composite Grouping
				Mental computation involving addition and subtraction with 2- and 3-digit numbers	Multiplication and Division as Operations

### Topic Structuring to 10

	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Setting						
Task						
Questions						

## First Grade Lesson Study

### 10's Go Fish

Investigations Unit: Number Games and Story Problems

## Now What?

- How will you introduce the lesson?
- Do students have experience with the materials?
- How will you group students?
- Identify Key Concepts, Vocabulary/Lang. Structures, Guiding Questions

## Whole Class Warm Up (10 minutes)

- Bunny Ears
- Introduce 5 and 10 frames
- Flash 5/10 frames

## Introduce Activity: Whole Class

- Round 1 (Pairs): Match 10 Frame to numeral
  - 1 student has 10 frame cards
  - 1 student has numeral cards
  - Play go fish, make matches, say number and make it on fingers to collect cards.
- Round 2: (All) Partners switch cards.

## Key Concepts: (Explicit, visible)

- The 10's Frame has a structure of 2 rows of 5 squares.
- Each number 0-10 can be shown on the 10's frame.
- First, we can use the 10's Frame to know "how many" by counting the dots. Then we can know "how many" without counting.
- We can use the 10's frame to figure out how many more to make 10.
- The 10's Frame has a similar structure as our fingers.
- 10 is an important number in our number system. We can use what we know about 10 to help us solve problems.

## Key Vocabulary and Language Structures:

- Frame: door frame, window frame, picture frame
- 10's Frame
- Top row
- Bottom row
- Do you have a \_\_\_\_
- Go fish
- \_\_\_\_ and \_\_\_\_ make 10
- \_\_\_\_ and \_\_\_\_ is a match
- How many more to make \_\_\_\_?
- I need \_\_\_\_ more to make \_\_\_\_

## Guiding Questions

- How many are there?
- How do you know?
- How many more do you need?
- How many are on the top/bottom?
- How does that work with your fingers, math rack etc?

## Class Congress

- Which 10 frames are easiest for matching? For making 10?
- Which ones do you know without counting? How do you know?
- Tell how your fingers are like the 10 frames.

## Further exploration of activity: Level 0

- 5's Match- numeral card to 5 Frame
- 5's Go Fish with 5 Frames
- 5's Go Fish with mix of 5 frames and numerals 0-5
- 5's Go Fish with numerals 0-5

### Levels 1-2:

- Numeral card to 10 frame match
- 10's Go Fish with 10 frames
- 10's Go Fish with a mix of 10 frames and numeral cards 0-10
- 10's Go Fish with numeral cards (blank 10 frame can provide support)

### Levels 3-5: Extensions

- Make 10 with 3 numeral cards using addition and subtraction
- Make 0 with 3 numeral cards using addition and subtraction
- Make \_\_\_\_ (>10) using 3 numeral cards using any operation (blank double 10 frame can support)

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Thank you!