Math Core Instructional Strategies Checklist/Self-Assessment (Elementary)

Teacher:	**Grade**	**Topic/Lesson:**

Focus Areas	Present?	Evidence
What does the teacher do?		
Number Sense & Base 10		
Ask students to estimate/predict		
Ask students to check reasonableness of solutions		
Present students with a variety of representations for ordering, grouping, regrouping		
Ask students to use multiple representations of thinking and work (e.g. pictures, manipulatives, words)		
Present content through the CRA model (concrete, representational, abstract), including use of manipulatives		
Present opportunities to increase students' ability to subitize using a variety of models and representations.		
Ask students to name numbers in different ways (e.g. traditional, base ten names, by groups)		
Ask students to use manipulatives to group and regroup numbers with a focus on expressing numbers efficiently		
Use a variety of manipulatives and representations to explore different/more efficient ways to count		
Include number talks, giving students an opportunity to discuss their thinking about numbers and strategies		

Give students opportunities to reflect on their thinking and reasoning about numbers, operations, and strategies		
What does the teacher do?		
Number Sense and Place Value		
Give students opportunities to explore place value using a variety of materials, manipulatives, tools, and models (e.g. place value cards/chips, pocket chart, games)		
Ask students to order and compare values of numbers with attention to place value		
Ask students to name large numbers with attention to place value		
Ask students to round numbers using a number line (closer to which?)		
Addition, Subtraction, Multiplication, & Division		
Ask students to look for and discuss patterns		
Ask students to apply multiple strategies for adding and subtracting		
Ask students to use multiple representations of thinking and work (e.g. pictures, number lines, words, manipulatives)		
Use authentic problems/rich tasks		
Provide students with manipulatives and tools to practice a variety of addition and subtraction strategies (e.g. Base 10 Blocks, two color counters, virtual manipulatives, hundreds charts)		
Present content through the CRA model (concrete, representational, abstract), including use of manipulatives		

Include number talks, giving students an opportunity to discuss their thinking and strategies for adding and subtracting		

What does the student do?		
Focus Areas	Present?	Evidence
Number Sense & Base 10		
Students reasonably estimate/predict solutions to problems		
Students check and justify reasonableness of solutions		
Students use a variety of representations for ordering, grouping, regrouping in Base 10		
Students use multiple representations (e.g. tables, pictures, graphs, words, number lines)		
Students use manipulatives appropriately and productively		
Students make connections between concrete and representational models		
Students make generalizations and abstractions from concrete and representational models		
Students subitize using a variety of models and representations.		
Students name numbers in different ways (e.g. traditional, base ten names, by groups)		
Students use manipulatives to group and regroup numbers with a focus on expressing numbers efficiently		
Students use a variety of manipulatives and representations to explore different/more efficient ways to count		

Students actively participate in number talks, discussing their thinking about numbers and strategies		
What does the student do?		
Number Sense and Place Value		
Explore place value using a variety of materials, manipulatives, tools, and models (e.g. place value cards/chips, pocket chart, games)		
Order and compare values of numbers with attention to place value		
Name large numbers with attention to place value		
Round numbers using a number line (closer to which?)		
Addition, Subtraction, Multiplication, & Division		
Look for and discuss patterns		
Apply multiple strategies for adding and subtracting		
Use multiple representations of thinking and work (e.g. pictures, number lines, words, manipulatives)		
Use authentic problems/rich tasks		
Use manipulatives and tools to practice a variety of addition and subtraction strategies (e.g. Base 10 Blocks, two color counters, virtual manipulatives, hundreds charts)		
Explore content through the CRA model (concrete, representational, abstract), including use of manipulatives		
Participate in number talks, discussing their thinking and strategies for adding and subtracting		

What does student work look like?		
Number Sense & Base 10		
Estimations and prediction are made prior to computation		
Reasonableness of solutions is assessed after a solution is found		
Student works includes a variety of representations for ordering, grouping, regrouping in Base 10		
Student work fosters application of multiple strategies		
Student work presents opportunities for multiple representations (e.g. tables, pictures, graphs, words, number lines)		
Student work presents opportunities for appropriate and productive use of manipulatives		
Work provides students opportunities to make connections between concrete and representational models		
Work provides students opportunities to make generalizations and abstractions from concrete and representational models		
Work provides students opportunities to subitize using a variety of models and representations.		
Work provides students opportunities to name numbers in different ways (e.g. traditional, base ten names, by groups)		
Work provides students opportunities to use manipulatives to group and regroup numbers with a focus on expressing numbers efficiently		
Work provides students opportunities to use a variety of manipulatives and representations to explore different/more efficient ways to count		

Class time includes number talks, where students may discuss their thinking about numbers and strategies		
What does student work look like?		
Number Sense & Place Value		
Student work provides students with opportunities to explore place value using a variety of materials, manipulatives, tools, and models (e.g. place value cards/chips, pocket chart, games)		
Student work provides students with opportunities to order and compare values of numbers with attention to place value		
Student work provides students with opportunities to name large numbers with attention to place value		
Student work provides students with opportunities to round numbers using a number line (closer to which?)		
Addition, Subtraction, Multiplication, & Division		
Student work provides opportunities for students to look for and describe patterns		
Student work provides opportunities for students to apply multiple strategies for adding and subtracting		
Student work provides opportunities for students to use multiple representations of thinking and work (e.g. pictures, number lines, words, manipulatives)		
Student work provides students with authentic problems/rich tasks		
Student work provides opportunities for students to work with manipulatives and tools to practice a variety of addition and subtraction strategies (e.g. Base 10 Blocks, two color counters, virtual manipulatives, hundreds charts)		
Student work provides opportunities for students to progress through the CRA model		

Student work includes number talks, giving students an opportunity to discuss their thinking and strategies for adding and subtracting		