

Number Sense Rubric

SNAP (Student Numeracy Assessment & Practice)

Competency	Emerging <i>The student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning.</i>	Developing <i>The student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning.</i>	Proficient <i>The student demonstrates a complete understanding of the concepts and competencies relevant to the expected learning.</i>	<i>Teacher notes for demonstration of understanding and applications beyond proficiency</i>
Communicating and Representing <i>Picture Box</i>	<ul style="list-style-type: none"> Pictures do not show the value of the number Inaccurate 	<ul style="list-style-type: none"> Pictures show some value in representing the number Partially accurate 	<ul style="list-style-type: none"> Pictures are clearly communicated and represent the value of the number (e.g. base ten and/or symbols) Accurate 	
<i>Describe Picture</i>	<ul style="list-style-type: none"> Description and elaboration of pictorial representation is not evident Communication is not clear 	<ul style="list-style-type: none"> Partial accuracy in describing and elaborating on pictorial representation AND/OR partially communicated 	<ul style="list-style-type: none"> Accurately describes and elaborates on pictorial representation (e.g. legend, key, or words) Clearly communicated 	
<i>Expanded Form</i>	<ul style="list-style-type: none"> Emergent understanding of the value of digits in their place values 	<ul style="list-style-type: none"> Partially accurate in demonstrating the value of each digit (40000 +2000+139=42139 OR 40000+100 +30+9=42139) 	<ul style="list-style-type: none"> Accurately demonstrates the value of each digit (e.g. 500+20+4 or five hundreds, 2 tens, and 4 ones) 	
Understanding and Solving <i>3 Equations</i>	<ul style="list-style-type: none"> Emergent use of operations 	<ul style="list-style-type: none"> Accurately uses grade appropriate operations in one or two equations 	<ul style="list-style-type: none"> Accurately uses grade appropriate operations in all three equations (see Exemplars for examples) 	
Connecting and Reflecting <i>Real Life Connection</i>	<ul style="list-style-type: none"> A real-life example is not provided or is not connection to the number 	<ul style="list-style-type: none"> A partial connection to a real-life example is provided (e.g. "I bought a house for \$319") 	<ul style="list-style-type: none"> Connection to a real-life example is provided Demonstrates understanding of the number value (e.g. 5347 leaves on a small tree shows understanding; "I live at 5347 Elm St," does not) 	
<i>Reflection</i>	<ul style="list-style-type: none"> With support, student is not yet able to reflect on their learning 	<ul style="list-style-type: none"> Can partially identify strengths and stretches (e.g. "Everything was easy. Nothing was hard.") 	<ul style="list-style-type: none"> With sentence frames and structure, can proficiently reflect on their learning (e.g. "I feel confident with ____; ____ was challenging; my goal is ____") 	
Reasoning and Analyzing <i>Number Line</i>	<ul style="list-style-type: none"> Emergent understanding of the placement of the number on a number line 	<ul style="list-style-type: none"> Partially correct estimate of placement of number on provided number line; benchmarks may be missing 	<ul style="list-style-type: none"> Correct estimate of placement of number on provided number line with at least three benchmarks and appropriate endpoints. 	
<i>Counting Forwards and Backwards</i>	<ul style="list-style-type: none"> Emergent understanding of place value, number sense, and/or skip counting 	<ul style="list-style-type: none"> Partially complete and accurate 	<ul style="list-style-type: none"> Complete and accurate; demonstrates understanding but may include a minor recording error 	



Operations Rubric

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Competency	Emerging <i>Student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning</i>	Developing <i>Student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning</i>	Proficient <i>Student demonstrates a complete understanding of the concepts and competencies relevant to the expected learning</i>	Extending <i>Student demonstrates an insightful understanding of the concepts and competencies relevant to the expected learning</i>
Communicating and Representing <i>Entire Assessment</i>	<ul style="list-style-type: none"> Communication (written, pictorial or symbolic) of understanding is emerging 	<ul style="list-style-type: none"> Communicates (written, pictorial or symbolic) partial understanding 	<ul style="list-style-type: none"> Communicates (written, pictorial or symbolic) clear understanding 	<ul style="list-style-type: none"> Communicates (written, pictorial or symbolic) insightful understanding in multiple ways
Understanding and Solving <i>Draw & Calculate Boxes</i>	<ul style="list-style-type: none"> Emergent use of strategies to solve the problem and show understanding 	<ul style="list-style-type: none"> Strategies chosen do not lead to an accurate solution Reasoning to solve the problem is absent 	<ul style="list-style-type: none"> Uses grade appropriate strategies to correctly solve the problem and show understanding 	<ul style="list-style-type: none"> Uses multiple strategies and/or insightful reasoning to correctly solve the problem and show understanding
Connecting and Reflecting <i>Real Life Example/ Word Problem</i>	<ul style="list-style-type: none"> Emerging ability to connect mathematical concepts to real life examples 	<ul style="list-style-type: none"> Real life example and connections to mathematical concepts are partially developed 	<ul style="list-style-type: none"> Real life example and connections to mathematical concepts are evident The example shows a clear connection to the operation 	<ul style="list-style-type: none"> Real life example and connections to mathematical concepts are insightful
<i>Reflection</i>	<ul style="list-style-type: none"> With support, student is not yet able to reflect on their learning 	<ul style="list-style-type: none"> Can partially identify strengths and stretches <i>"Everything was easy; nothing was hard"</i> 	<ul style="list-style-type: none"> With sentence frames and structure, can proficiently reflect on their learning <i>" I feel confident with ____; ____ was challenging; my goal is ____"</i> 	<ul style="list-style-type: none"> Insightful reflection on mathematical thinking is evident
Reasoning and Analyzing <i>Estimate & Justify Box</i>	<ul style="list-style-type: none"> Emerging ability to use Estimation/mental math strategies Estimate is not yet reasonable and justification not provided 	<ul style="list-style-type: none"> Calculates rather than estimates <i>"I think it is 366 because $3 \times 122 = 366$"</i> Strategy use is not justified <i>"My guess is 300 because I used mental math"</i> 	<ul style="list-style-type: none"> Reasonable estimation provided Clearly explains strategy <i>"I think it is about 360 because I did $3 \times 100 = 300$ and $3 \times 20 = 60$ and added $300 + 60$"</i> 	<ul style="list-style-type: none"> Reasonable estimation provided and insightfully explains the strategy <i>"I think it is about 360 because I did $3 \times 100 = 300$ and $3 \times 20 = 60$ and added $300 + 60$ but the solution is greater than that because I rounded down"</i>