

Name: _____ Date: _____

Assessment Master 4 Performance Task Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> • explains and demonstrates that: <ul style="list-style-type: none"> – a repeating pattern repeats the core – an increasing pattern grows by adding a given number of elements at each step – identifying a pattern core makes it possible to identify missing elements in or extend a repeating pattern 	<input type="checkbox"/> with one-to-one assistance, shows very limited understanding of patterning concepts including: <ul style="list-style-type: none"> – repeating patterns – increasing patterns – pattern cores 	<input type="checkbox"/> with prompting, shows partial understanding of patterning concepts including: <ul style="list-style-type: none"> – repeating patterns – increasing patterns – pattern cores 	<input type="checkbox"/> shows basic understanding of patterning concepts including: <ul style="list-style-type: none"> – repeating patterns – increasing patterns – pattern cores 	<input type="checkbox"/> shows in-depth understanding of patterning concepts including: <ul style="list-style-type: none"> – repeating patterns – increasing patterns – pattern cores
Procedural knowledge <ul style="list-style-type: none"> • identifies pattern core • copies and extends a repeating pattern • copies and extends an increasing pattern 	<input type="checkbox"/> needs one-to-one help; major errors or omissions in: <ul style="list-style-type: none"> – identifying pattern core – copying and extending a repeating pattern – copying and extending an increasing pattern 	<input type="checkbox"/> somewhat accurate; may make several minor errors in: <ul style="list-style-type: none"> – identifying pattern core – copying and extending a repeating pattern – copying and extending an increasing pattern 	<input type="checkbox"/> generally accurate; few errors in: <ul style="list-style-type: none"> – identifying pattern core – copying and extending a repeating pattern – copying and extending an increasing pattern 	<input type="checkbox"/> accurate; very few or no errors in: <ul style="list-style-type: none"> – identifying pattern core – copying and extending a repeating pattern – copying and extending an increasing pattern
Problem-solving skills <ul style="list-style-type: none"> • uses appropriate strategies to: <ul style="list-style-type: none"> – create a double attribute pattern – create an increasing pattern 	<input type="checkbox"/> needs assistance to use appropriate strategies to <ul style="list-style-type: none"> – create a double attribute repeating pattern – create an increasing pattern 	<input type="checkbox"/> with limited assistance, uses some appropriate strategies to <ul style="list-style-type: none"> – create a double attribute repeating pattern – create an increasing pattern 	<input type="checkbox"/> chooses appropriate strategies to: <ul style="list-style-type: none"> – create a double attribute repeating pattern – create an increasing pattern 	<input type="checkbox"/> uses appropriate, often innovative strategies to: <ul style="list-style-type: none"> – create a double attribute repeating pattern – create an increasing pattern
Communication <ul style="list-style-type: none"> • describes patterns • uses appropriate patterning language (e.g., <i>repeat</i>, <i>grow</i>, <i>pattern core</i>) 	<input type="checkbox"/> unable to clearly describe patterns <ul style="list-style-type: none"> – rarely uses appropriate patterning language; unclear and imprecise 	<input type="checkbox"/> partially able to describe patterns <ul style="list-style-type: none"> – sometimes uses appropriate patterning language; somewhat clear and precise 	<input type="checkbox"/> describes patterns <ul style="list-style-type: none"> – usually uses appropriate patterning language; generally clear and precise 	<input type="checkbox"/> describes patterns with precision <ul style="list-style-type: none"> – confidently uses appropriate patterning language; clear and precise

Name: _____ Date: _____

Assessment Master 5 Patterning Rubric

This chart can be used to make decisions about children's achievement of unit outcomes.

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> shows understanding of repeating patterns (e.g., describes a pattern; explains pattern rule; predicts the next element in a pattern) shows understanding of increasing patterns (e.g., describes a pattern; explains pattern rule; determines missing elements) 	<input type="checkbox"/> with assistance, shows very limited understanding of: <ul style="list-style-type: none"> repeating patterns (3–5 elements; double attributes) increasing patterns 	<input type="checkbox"/> shows partial understanding of: <ul style="list-style-type: none"> repeating patterns (3–5 elements; double attributes) increasing patterns 	<input type="checkbox"/> shows understanding of: <ul style="list-style-type: none"> repeating patterns (3–5 elements; double attributes) increasing patterns 	<input type="checkbox"/> shows in-depth understanding, in a variety of contexts, of: <ul style="list-style-type: none"> repeating patterns (3–5 elements; double attributes) increasing patterns
Procedural knowledge <ul style="list-style-type: none"> describes, extends, compares, and creates repeating patterns describes, reproduces, extends, and creates increasing patterns 	<input type="checkbox"/> needs ongoing assistance; little accuracy; major errors/ omissions in: <ul style="list-style-type: none"> describing, extending, comparing, and creating repeating patterns describing, reproducing, extending, and creating increasing patterns 	<input type="checkbox"/> somewhat accurate; minor errors/ omissions in: <ul style="list-style-type: none"> describing, extending, comparing, and creating repeating patterns describing, reproducing, extending, and creating increasing patterns 	<input type="checkbox"/> generally accurate; few errors/ omissions in: <ul style="list-style-type: none"> describing, extending, comparing, and creating repeating patterns describing, reproducing, extending, and creating increasing patterns 	<input type="checkbox"/> accurate; very few or no errors/omissions in: <ul style="list-style-type: none"> describing, extending, comparing, and creating repeating patterns describing, reproducing, extending, and creating increasing patterns
Problem-solving skills <ul style="list-style-type: none"> chooses and carries out a range of patterning strategies (e.g., concrete objects, pictures, numbers) to: create patterns solve and create problems 	<input type="checkbox"/> needs assistance to: <ul style="list-style-type: none"> create simple patterns use patterning to create and solve simple problems 	<input type="checkbox"/> with limited assistance, able to: <ul style="list-style-type: none"> create simple patterns create and solve simple problems 	<input type="checkbox"/> in familiar contexts, able to: <ul style="list-style-type: none"> create patterns create and solve problems 	<input type="checkbox"/> in a variety of contexts, able to: <ul style="list-style-type: none"> create increasingly complex patterns create and solve a variety of problems
Communication <ul style="list-style-type: none"> explains her reasoning and procedures clearly, including appropriate terminology 	<input type="checkbox"/> unable to explain reasoning and procedures	<input type="checkbox"/> partially explains reasoning and procedures	<input type="checkbox"/> explains reasoning and procedures clearly	<input type="checkbox"/> explains reasoning and procedures clearly, confidently, and with precision

Name: _____ Date: _____

Assessment Master 4 Performance Task Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> • estimates quantities and describes strategies • describes and demonstrates different ways of counting • represents and describes numbers in different ways 	<input type="checkbox"/> shows very limited understanding of number concepts <ul style="list-style-type: none"> – makes reasonable estimates – describes estimating strategies – describes and demonstrates different ways of counting – represents and describes numbers in different ways 	<input type="checkbox"/> shows some understanding of number concepts; with prompting and support, able to <ul style="list-style-type: none"> – make reasonable estimates – describe estimating strategies – describe and demonstrate different ways of counting – represent and describe numbers in different ways 	<input type="checkbox"/> shows basic understanding of number concepts; able to <ul style="list-style-type: none"> – make reasonable estimates – describe estimating strategies – describe and demonstrate different ways of counting – represent and describe numbers in different ways 	<input type="checkbox"/> shows in-depth understanding of number concepts; independently able to <ul style="list-style-type: none"> – make reasonable estimates – describe estimating strategies – describe and demonstrate different ways of counting – represent and describe numbers in different ways
Procedural knowledge <ul style="list-style-type: none"> • counts accurately • compares numbers 	<input type="checkbox"/> needs one-to-one help; makes major errors in <ul style="list-style-type: none"> – counting – comparing numbers 	<input type="checkbox"/> partially accurate; makes minor errors in <ul style="list-style-type: none"> – counting – comparing numbers 	<input type="checkbox"/> generally accurate; makes few minor errors in <ul style="list-style-type: none"> – counting – comparing numbers 	<input type="checkbox"/> accurate; very few or no errors in <ul style="list-style-type: none"> – counting – comparing numbers
Problem-solving skills <ul style="list-style-type: none"> • represents the same number in a variety of different ways 	<input type="checkbox"/> needs one-to-one, step-by-step assistance to represent the same number in different ways	<input type="checkbox"/> needs help to choose strategies; with limited assistance, able to represent the same number in different ways	<input type="checkbox"/> chooses and uses appropriate strategies to represent the same number in different ways	<input type="checkbox"/> chooses and uses effective strategies; independently able to represent the same number in different ways; often innovative
Communication <ul style="list-style-type: none"> • uses appropriate language to explain reasoning and procedures clearly (e.g., <i>odd, even, first, ones, tens</i>) 	<input type="checkbox"/> unable to use appropriate language to explain reasoning and procedures	<input type="checkbox"/> uses limited appropriate language to explain reasoning and procedures	<input type="checkbox"/> uses appropriate language to clearly explain reasoning and procedures	<input type="checkbox"/> uses appropriate language to clearly explain reasoning and procedures, confidently, and with precision

Name: _____ Date: _____

Assessment Master 5 Numbers to 100 Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> shows understanding and reasoning of number concepts by: <ul style="list-style-type: none"> demonstrating if a number is odd or even representing and describing numbers to 100 in various ways making reasonable estimates demonstrating place value concepts concretely and pictorially with 2-digit numbers demonstrating and explaining equality and inequality 	<input type="checkbox"/> shows little or no understanding and/or reasoning of number concepts; may be unable to <ul style="list-style-type: none"> demonstrate if a number is odd or even represent and describe numbers (various ways) make reasonable estimates demonstrate place value concepts demonstrate and explain equality/inequality 	<input type="checkbox"/> uses and shows partial understanding and ability to reason with number concepts; able to <ul style="list-style-type: none"> demonstrate if a number is odd or even represent and describe numbers (various ways) make reasonable estimates demonstrate place value concepts demonstrate and explain equality/inequality 	<input type="checkbox"/> uses and shows basic understanding and reasoning with number concepts; able to <ul style="list-style-type: none"> demonstrate if a number is odd or even represent and describe numbers (various ways) make reasonable estimates demonstrate place value concepts demonstrate and explain equality/inequality 	<input type="checkbox"/> uses and shows in-depth understanding and reasoning; able to <ul style="list-style-type: none"> demonstrate if a number is odd or even represent and describe numbers (various ways) make reasonable estimates demonstrate place value concepts demonstrate and explain equality/inequality
Procedural knowledge <ul style="list-style-type: none"> uses ordinal numbers (to tenth) compares and orders numbers (on a number line and a 100-chart) counts from 0 to 100 (by 1s, 2s, 5s, 10s) counts a given sum of money (with pennies, nickels, dimes to 100¢) reads numbers and number words (0-100); uses number words (0-20) 	<input type="checkbox"/> often makes major errors/omissions in using ordinal numbers <ul style="list-style-type: none"> comparing and ordering numbers counting to 100 (1s, 2s, 5s, 10s) counting with money reading numerals and number words (to 100); recording number words (to 20) 	<input type="checkbox"/> partially accurate; frequent minor errors/omissions in using ordinal numbers <ul style="list-style-type: none"> comparing and ordering numbers counting to 100 (1s, 2s, 5s, 10s) counting with money reading numerals and number words (to 100); recording number words (to 20) 	<input type="checkbox"/> generally accurate; few errors/ omissions in using ordinal numbers <ul style="list-style-type: none"> comparing and ordering numbers counting to 100 (1s, 2s, 5s, 10s) counting with money reading numerals and number words (to 100); recording number words (to 20) 	<input type="checkbox"/> accurate; very few or no errors/ omissions in using ordinal numbers <ul style="list-style-type: none"> comparing and ordering numbers counting to 100 (1s, 2s, 5s, 10s) counting with money reading numerals and number words (to 100); recording number words (to 20)
Problem-solving skills <ul style="list-style-type: none"> chooses and carries out a range of strategies to estimate, represent, and describe numbers 	<input type="checkbox"/> needs assistance to choose and carry out appropriate problem-solving strategies	<input type="checkbox"/> with some assistance, chooses and carries out some appropriate problem-solving strategies	<input type="checkbox"/> chooses and carries out appropriate problem-solving strategies	<input type="checkbox"/> chooses and carries out appropriate and effective problem-solving strategies in a variety of contexts; may be innovative
Communication <ul style="list-style-type: none"> explains reasoning and procedures clearly, including appropriate terminology 	<input type="checkbox"/> unable to explain reasoning and procedures	<input type="checkbox"/> partially explains reasoning and procedure	<input type="checkbox"/> explains reasoning and procedures clearly	<input type="checkbox"/> explains reasoning, and procedures, clearly, confidently, and with precision

Name: _____ Date: _____

Assessment Master 4 Performance Task Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> shows understanding of addition and subtraction by: <ul style="list-style-type: none"> choosing and explaining appropriate strategies connecting addition and subtraction to real-life experiences 	<input type="checkbox"/> shows very limited understanding of addition and subtraction; needs one-to-one assistance to <ul style="list-style-type: none"> choose and explain appropriate strategies connect addition and subtraction to real-life experiences 	<input type="checkbox"/> shows some understanding of addition and subtraction; with prompting and support, able to <ul style="list-style-type: none"> choose and explain appropriate strategies connect addition and subtraction to real-life experiences 	<input type="checkbox"/> shows basic understanding of addition and subtraction; able to <ul style="list-style-type: none"> choose and explain appropriate strategies connect addition and subtraction to real-life experiences 	<input type="checkbox"/> shows in-depth understanding of addition and subtraction; independently able to <ul style="list-style-type: none"> choose and explain appropriate strategies connect addition and subtraction to real-life experiences
Procedural knowledge <ul style="list-style-type: none"> creates and records addition stories with a sum of 16 creates and records subtraction stories with a difference of 3 records result of changing addends by taking from one group and giving to another 	<input type="checkbox"/> needs one-to-one help; frequent errors in <ul style="list-style-type: none"> creating and recording addition stories creating and recording subtraction stories recording result of changing addends 	<input type="checkbox"/> partially accurate; makes some errors in <ul style="list-style-type: none"> creating and recording addition stories creating and recording subtraction stories recording result of changing addends 	<input type="checkbox"/> generally accurate; may make a few minor errors in <ul style="list-style-type: none"> creating and recording addition stories creating and recording subtraction stories recording result of changing addends 	<input type="checkbox"/> accurate; very few or no errors in <ul style="list-style-type: none"> creating and recording addition stories creating and recording subtraction stories recording result of changing addends
Problem-solving skills <ul style="list-style-type: none"> chooses and carries out appropriate personal strategies to create and solve problems 	<input type="checkbox"/> needs one-to-one, step-by-step assistance to create and solve problems <ul style="list-style-type: none"> create and solve problems 	<input type="checkbox"/> needs help to choose strategies; with limited assistance, able to create and solve problems <ul style="list-style-type: none"> create and solve problems 	<input type="checkbox"/> chooses and uses appropriate strategies to create and solve problems <ul style="list-style-type: none"> create and solve problems 	<input type="checkbox"/> chooses and uses effective strategies; independently able to create and solve problems; often innovative <ul style="list-style-type: none"> create and solve problems
Communication <ul style="list-style-type: none"> explains his reasoning and procedures clearly, using appropriate terms (e.g., <i>sum</i>, <i>difference</i>) 	<input type="checkbox"/> unable to explain his reasoning and procedures <ul style="list-style-type: none"> explain his reasoning and procedures 	<input type="checkbox"/> partially explains his reasoning and procedures <ul style="list-style-type: none"> explain his reasoning and procedures 	<input type="checkbox"/> explains his reasoning and procedures clearly <ul style="list-style-type: none"> explain his reasoning and procedures 	<input type="checkbox"/> explains his reasoning and procedures clearly, confidently, and with some precision <ul style="list-style-type: none"> explain his reasoning and procedures

Name: _____ Date: _____

Assessment Master 5 Addition and Subtraction to 18 Rubric

This rubric can be used to assess and summarize children's achievement of unit outcomes:

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
<p>Conceptual understanding</p> <ul style="list-style-type: none"> shows understanding of addition and subtraction processes by explaining and/or demonstrating: <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies for adding and subtracting that the order in which numbers are added does not affect the sum that the order in which numbers are subtracted may affect the difference 	<p><input type="checkbox"/> shows very limited understanding; needs one-to-one assistance to explain and/or demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies order in which numbers are added does not affect sum order in which numbers are subtracted may affect the difference 	<p><input type="checkbox"/> shows some understanding; with prompting and support, able to explain and/or demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies order in which numbers are added does not affect sum order in which numbers are subtracted may affect the difference 	<p><input type="checkbox"/> shows basic understanding; able to explain and/or demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies order in which numbers are added does not affect sum order in which numbers are subtracted may affect the difference 	<p><input type="checkbox"/> shows in-depth understanding; independently able to demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies order in which numbers are added does not affect sum order in which numbers are subtracted may affect the difference
<p>Procedural knowledge</p> <ul style="list-style-type: none"> adds and subtracts (to 18) uses mental mathematics strategies for basic addition facts to 18 and corresponding subtraction identifies equalities and inequalities 	<p><input type="checkbox"/> needs one-to-one help; makes frequent errors in:</p> <ul style="list-style-type: none"> adding (to 18) subtracting (to 18) mental math for basic facts (to 18) identifying equalities and inequalities 	<p><input type="checkbox"/> partially accurate; some errors in</p> <ul style="list-style-type: none"> adding (to 18) subtracting (to 18) mental math for basic facts (to 18) identifying equalities and inequalities 	<p><input type="checkbox"/> generally accurate ; may make a few minor errors in</p> <ul style="list-style-type: none"> adding (to 18) subtracting (to 18) mental math for basic facts (to 18) identifying equalities and inequalities 	<p><input type="checkbox"/> accurate; very few or no errors in</p> <ul style="list-style-type: none"> adding (to 18) subtracting (to 18) mental math for basic facts (to 18) identifying equalities and inequalities
<p>Problem-solving skills</p> <ul style="list-style-type: none"> chooses and carries out personal strategies to create and solve addition and subtraction problems 	<p><input type="checkbox"/> needs assistance to choose and carry out appropriate problem-solving strategies</p>	<p><input type="checkbox"/> with limited assistance, chooses and carries out some appropriate problem-solving strategies</p>	<p><input type="checkbox"/> chooses and carries out appropriate problem-solving strategies</p>	<p><input type="checkbox"/> chooses and carries out appropriate and effective problem-solving strategies in a variety of contexts; may be innovative</p>
<p>Communication</p> <ul style="list-style-type: none"> explains her reasoning and procedures clearly, using appropriate terms (e.g., <i>zero</i>, <i>sum</i>, <i>difference</i>) 	<p><input type="checkbox"/> unable to explain her reasoning and procedures</p>	<p><input type="checkbox"/> partially explains her reasoning and procedures</p>	<p><input type="checkbox"/> explains her reasoning and procedures clearly</p>	<p><input type="checkbox"/> explains her reasoning and procedures clearly, confidently, and with some precision</p>

Name: _____ Date: _____

Assessment Master 4 Performance Task Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> shows understanding of measurement by: <ul style="list-style-type: none"> choosing appropriate units making reasonable estimates explaining his thinking and conclusions 	<input type="checkbox"/> shows very limited understanding of measurement; needs one-to-one assistance to: <ul style="list-style-type: none"> choose appropriate units make reasonable estimates explain his thinking and conclusions 	<input type="checkbox"/> shows some understanding of measurement; with prompting and support, able to: <ul style="list-style-type: none"> choose appropriate units make reasonable estimates explain his thinking and conclusions 	<input type="checkbox"/> shows basic understanding of measurement; able to: <ul style="list-style-type: none"> choose appropriate units make reasonable estimates explain his thinking and conclusions 	<input type="checkbox"/> shows in-depth understanding of measurement; independently able to: <ul style="list-style-type: none"> choose appropriate units make reasonable estimates explain his thinking and conclusions
Procedural knowledge <ul style="list-style-type: none"> measures length using multiple copies or a single copy of a unit (non-standard) measures height (non-standard units) measures and compares distance around (non-standard units) measures and compares mass using a balance (non-standard) reads a calendar relates days to a week 	<input type="checkbox"/> needs one-to-one help; frequent errors in: <ul style="list-style-type: none"> measuring length using multiple copies or a single copy of a unit measuring height measuring and comparing distance around measuring and comparing mass reading a calendar relating days to a week 	<input type="checkbox"/> partially accurate; makes some errors in: <ul style="list-style-type: none"> measuring length using multiple copies or a single copy of a unit measuring height measuring and comparing distance around measuring and comparing mass reading a calendar relating days to a week 	<input type="checkbox"/> generally accurate; may make a few minor errors in: <ul style="list-style-type: none"> measuring length using multiple copies or a single copy of a unit measuring height measuring and comparing distance around measuring and comparing mass reading a calendar relating days to a week 	<input type="checkbox"/> accurate; very few or no errors in: <ul style="list-style-type: none"> measuring length using multiple copies or a single copy of a unit measuring height measuring and comparing distance around measuring and comparing mass reading a calendar relating days to a week
Problem-solving skills <ul style="list-style-type: none"> chooses and carries out appropriate strategies, including estimation, to solve the problems 	<input type="checkbox"/> needs one-to-one, step-by-step assistance to solve the problems <ul style="list-style-type: none"> the problems 	<input type="checkbox"/> needs help to choose strategies; with limited assistance, able to solve the problems <ul style="list-style-type: none"> the problems 	<input type="checkbox"/> chooses and uses appropriate strategies to solve the problems <ul style="list-style-type: none"> the problems 	<input type="checkbox"/> chooses and uses effective strategies; independently able to solve the problems; often innovative <ul style="list-style-type: none"> the problems
Communication <ul style="list-style-type: none"> explains his reasoning and procedures clearly, using appropriate terms (e.g., unit, length, mass) 	<input type="checkbox"/> unable to explain his reasoning and procedures <ul style="list-style-type: none"> procedures 	<input type="checkbox"/> partially explains his reasoning and procedures <ul style="list-style-type: none"> procedures 	<input type="checkbox"/> explains his reasoning and procedures clearly <ul style="list-style-type: none"> procedures 	<input type="checkbox"/> explains his reasoning and procedures clearly, confidently, and with some precision <ul style="list-style-type: none"> procedures

Name: _____ Date: _____

Assessment Master 5 Measurement Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> Shows understanding of measurement by explaining and/or demonstrating: <ul style="list-style-type: none"> choice of an appropriate unit (non-standard) for a given task how choice of unit affects number needed her strategies for comparing and ordering how overlapping or leaving gaps affects accuracy how changing orientation of object does not alter measurements estimation strategies 	<input type="checkbox"/> shows very limited understanding; needs one-to-one assistance to explain/demonstrate: <ul style="list-style-type: none"> choice of an appropriate unit how choice of unit affects number needed strategies for comparing; ordering how overlapping or leaving gaps affects accuracy how changing orientation does not alter measurements estimation strategies 	<input type="checkbox"/> shows some understanding; with prompting and support, able to explain/demonstrate: <ul style="list-style-type: none"> choice of an appropriate unit how choice of unit affects number needed strategies for comparing; ordering how overlapping or leaving gaps affects accuracy how changing orientation does not alter measurements estimation strategies 	<input type="checkbox"/> shows basic understanding; able to explain/demonstrate: <ul style="list-style-type: none"> choice of an appropriate unit how choice of unit affects number needed strategies for comparing; ordering how overlapping or leaving gaps affects accuracy how changing orientation does not alter measurements estimation strategies 	<input type="checkbox"/> shows in-depth understanding; independently able to explain/demonstrate: <ul style="list-style-type: none"> choice of an appropriate unit how choice of unit affects number needed strategies for comparing; ordering how overlapping or leaving gaps affects accuracy how changing orientation does not alter measurements estimation strategies
Procedural knowledge <ul style="list-style-type: none"> reads a calendar names and orders days of week, months relates days to a week; months to a year measures, compares, and orders length, height, distance around, mass (non-standard units) measures length using multiple copies or a single copy of a unit 	<input type="checkbox"/> Needs one-to-one help; makes frequent errors in: <ul style="list-style-type: none"> reading a calendar naming, ordering days of week; months relating days to week; months to year measuring, comparing, ordering: length, height, distance around, mass using multiple copies or single copy of a unit 	<input type="checkbox"/> partially accurate; some errors in: <ul style="list-style-type: none"> reading a calendar naming, ordering days of week; months relating days to week; months to year measuring, comparing, ordering: length, height, distance around, mass using multiple copies or single copy of a unit 	<input type="checkbox"/> generally accurate; may make a few minor errors in: <ul style="list-style-type: none"> reading a calendar naming, ordering days of week; months relating days to week; months to year measuring, comparing, ordering: length, height, distance around, mass using multiple copies or single copy of a unit 	<input type="checkbox"/> accurate; very few or no errors in: <ul style="list-style-type: none"> reading a calendar naming, ordering days of week; months relating days to week; months to year measuring, comparing, ordering: length, height, distance around, mass using multiple copies or single copy of a unit
Problem-solving skills <ul style="list-style-type: none"> chooses and carries out appropriate strategies, including estimation, to solve problems involving measurement 	<input type="checkbox"/> needs assistance to choose and carry out appropriate problem-solving strategies <ul style="list-style-type: none"> chooses and carries out appropriate problem-solving strategies 	<input type="checkbox"/> with limited assistance, chooses and carries out some appropriate problem-solving strategies <ul style="list-style-type: none"> chooses and carries out some appropriate problem-solving strategies 	<input type="checkbox"/> chooses and carries out appropriate problem-solving strategies <ul style="list-style-type: none"> chooses and carries out appropriate problem-solving strategies 	<input type="checkbox"/> chooses and carries out appropriate and effective problem-solving strategies in a variety of contexts; may be innovative <ul style="list-style-type: none"> chooses and carries out appropriate and effective problem-solving strategies in a variety of contexts; may be innovative
Communication <ul style="list-style-type: none"> explains her reasoning and procedures clearly, using appropriate terms (e.g., <i>longer, unit</i>) 	<input type="checkbox"/> unable to explain her reasoning and procedures <ul style="list-style-type: none"> explains her reasoning and procedures 	<input type="checkbox"/> partially explains her reasoning and procedures <ul style="list-style-type: none"> explains her reasoning and procedures 	<input type="checkbox"/> explains her reasoning and procedures clearly <ul style="list-style-type: none"> explains her reasoning and procedures clearly 	<input type="checkbox"/> explains her reasoning and procedures clearly, confidently, and with some precision <ul style="list-style-type: none"> explains her reasoning and procedures clearly, confidently, and with some precision

Name: _____ Date: _____

Assessment Master 4

Performance Task Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
<p>Conceptual understanding shows understanding of addition and subtraction by:</p> <ul style="list-style-type: none"> representing the same 2-digit number in multiple ways choosing and explaining appropriate strategies connecting addition and subtraction to real-life experiences 	<p><input type="checkbox"/> shows very limited understanding of addition and subtraction; needs one-to-one assistance to</p> <ul style="list-style-type: none"> represent the same number in multiple ways choose and explain appropriate strategies connect addition and subtraction to real-life experiences 	<p><input type="checkbox"/> shows some understanding of addition and subtraction; with prompting and support, able to</p> <ul style="list-style-type: none"> represent the same number in multiple ways choose and explain appropriate strategies connect addition and subtraction to real-life experiences 	<p><input type="checkbox"/> shows basic understanding of addition and subtraction; able to</p> <ul style="list-style-type: none"> represent the same number in multiple ways choose and explain appropriate strategies connect addition and subtraction to real-life experiences 	<p><input type="checkbox"/> shows in-depth understanding of addition and subtraction; independently able to</p> <ul style="list-style-type: none"> represent the same number in multiple ways choose and explain appropriate strategies connect addition and subtraction to real-life experiences
<p>Procedural knowledge</p> <ul style="list-style-type: none"> represents 2-digit numbers as 10s and 1s, (on place value mat) records an addition story using numbers determines sums and differences 	<p><input type="checkbox"/> needs one-to-one help; frequent errors in</p> <ul style="list-style-type: none"> representing 2-digit numbers as 10s and 1s recording addition stories determining sums and differences 	<p><input type="checkbox"/> partially accurate; makes some errors in</p> <ul style="list-style-type: none"> representing 2-digit numbers as 10s and 1s recording addition stories determining sums and differences 	<p><input type="checkbox"/> generally accurate; may make a few minor errors in</p> <ul style="list-style-type: none"> representing 2-digit numbers as 10s and 1s recording addition stories determining sums and differences 	<p><input type="checkbox"/> accurate; very few or no errors in</p> <ul style="list-style-type: none"> representing 2-digit numbers as 10s and 1s recording addition stories determining sums and differences
<p>Problem-solving skills</p> <ul style="list-style-type: none"> chooses and carries out appropriate personal strategies to create and solve addition and subtraction story problems 	<p><input type="checkbox"/> needs one-to-one, step-by-step assistance to create and solve addition and subtraction story problems</p>	<p><input type="checkbox"/> needs help to choose strategies; with limited assistance, able to create and solve addition and subtraction story problems</p>	<p><input type="checkbox"/> chooses and uses appropriate strategies to create and solve addition and subtraction story problems</p>	<p><input type="checkbox"/> chooses and uses effective strategies; independently able to create and solve addition and subtraction story problems; often innovative</p>
<p>Communication</p> <ul style="list-style-type: none"> explains reasoning and procedures clearly, using appropriate terms (e.g., <i>sum</i>, <i>difference</i>) 	<p><input type="checkbox"/> unable to explain reasoning and procedures</p>	<p><input type="checkbox"/> partially explains reasoning and procedures</p>	<p><input type="checkbox"/> explains reasoning and procedures clearly</p>	<p><input type="checkbox"/> explains reasoning and procedures clearly, confidently, and with some precision</p>

Name: _____ Date: _____

Assessment Master 5

Addition and Subtraction to 100 Rubric

This chart can be used to make decisions about children’s achievement of unit outcomes.

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
<p>Conceptual understanding</p> <ul style="list-style-type: none"> shows understanding of addition and subtraction processes to 100 by explaining and/or demonstrating: <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies for adding and subtracting that the order in which numbers are added does not affect the sum that the order in which numbers are subtracted may affect the difference how adding and subtracting are related patterns when adding or subtracting tens 	<p><input type="checkbox"/> shows very limited understanding; needs one-to-one assistance to explain and/or demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies that the order in which numbers are added does not affect the sum that the order in which numbers are subtracted may affect the difference how adding and subtracting are related patterns when adding or subtracting 10s 	<p><input type="checkbox"/> shows some understanding; with prompting and support, able to explain and/or demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies that the order in which numbers are added does not affect the sum that the order in which numbers are subtracted may affect the difference how adding and subtracting are related patterns when adding or subtracting 10s 	<p><input type="checkbox"/> shows basic understanding; able to explain and/or demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies that the order in which numbers are added does not affect the sum that the order in which numbers are subtracted may affect the difference how adding and subtracting are related patterns when adding or subtracting 10s 	<p><input type="checkbox"/> shows in-depth understanding; independently able to demonstrate:</p> <ul style="list-style-type: none"> the effect of adding or subtracting zero personal strategies that the order in which numbers are added does not affect the sum that the order in which numbers are subtracted may affect the difference how adding and subtracting are related patterns when adding or subtracting 10s
<p>Procedural knowledge</p> <ul style="list-style-type: none"> adds 1- and 2-digit numbers (to 100) subtracts 1- and 2-digit numbers (to 100) 	<p><input type="checkbox"/> needs one-to-one help; makes frequent errors in:</p> <ul style="list-style-type: none"> adding (to 100) subtracting (1-digit and 2-digits only) 	<p><input type="checkbox"/> partially accurate; some errors in:</p> <ul style="list-style-type: none"> adding (to 100) subtracting (1-digit and 2-digits only) 	<p><input type="checkbox"/> generally accurate; may make a few minor errors in:</p> <ul style="list-style-type: none"> adding (to 100) subtracting (1-digit and 2-digits only) 	<p><input type="checkbox"/> accurate; very few or no errors in:</p> <ul style="list-style-type: none"> adding (to 100) subtracting (1-digit and 2-digits only)
<p>Problem-solving skills</p> <ul style="list-style-type: none"> chooses and carries out personal strategies to create and solve addition and subtraction problems (including missing minuends, addends, subtrahends) 	<p><input type="checkbox"/> needs assistance to choose and carry out appropriate problem-solving strategies</p>	<p><input type="checkbox"/> with limited assistance, chooses and carries out some appropriate problem-solving strategies</p>	<p><input type="checkbox"/> chooses and carries out appropriate problem-solving strategies</p>	<p><input type="checkbox"/> chooses and carries out appropriate and effective problem-solving strategies in a variety of contexts; may be innovative</p>
<p>Communication</p> <ul style="list-style-type: none"> explains reasoning and procedures clearly, using appropriate terms (e.g., <i>zero</i>, <i>sum</i>, <i>difference</i>) 	<p><input type="checkbox"/> unable to explain reasoning and procedures</p>	<p><input type="checkbox"/> partially explains reasoning and procedures</p>	<p><input type="checkbox"/> explains reasoning and procedures clearly</p>	<p><input type="checkbox"/> explains reasoning and procedures clearly, confidently, and with some precision</p>

Name: _____ Date: _____

Assessment Master 4 Performance Task Rubric

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> chooses and justifies attributes for sorting explains process of construction explains sorting rule 	<input type="checkbox"/> shows very limited understanding; needs one-to-one assistance to <ul style="list-style-type: none"> justify choice of attributes explain constructions explain sorting rule 	<input type="checkbox"/> shows some understanding; with prompting and support, able to <ul style="list-style-type: none"> justify choice of attributes explain constructions explain sorting rule 	<input type="checkbox"/> shows basic understanding; able to <ul style="list-style-type: none"> justify choice of attributes explain constructions explain sorting rule 	<input type="checkbox"/> shows in-depth understanding; independently able to <ul style="list-style-type: none"> justify choice of attributes explain constructions explain sorting rule
Procedural knowledge <ul style="list-style-type: none"> sorts by 2 geometric attributes identifies 3-D objects used in spaceship and own structure identifies 2-D shapes as part of 3-D objects 	<input type="checkbox"/> needs one-to-one help; makes frequent errors in <ul style="list-style-type: none"> sorting by 2 geometric attributes identifying 3-D objects identifying 2-D shapes 	<input type="checkbox"/> partially accurate; makes some errors in <ul style="list-style-type: none"> sorting by 2 geometric attributes identifying 3-D objects identifying 2-D shapes 	<input type="checkbox"/> generally accurate; may make a few minor errors in <ul style="list-style-type: none"> sorting by 2 geometric attributes identifying 3-D objects identifying 2-D shapes 	<input type="checkbox"/> accurate; very few or no errors in <ul style="list-style-type: none"> sorting by 2 geometric attributes identifying 3-D objects identifying 2-D shapes
Problem-solving skills <ul style="list-style-type: none"> uses suitable strategies to construct 3-D objects and use them to represent a spaceship 	<input type="checkbox"/> needs one-to-one, step-by-step assistance to <ul style="list-style-type: none"> construct 3-D objects use 3-D objects to represent a spaceship 	<input type="checkbox"/> needs help to choose strategies; with limited assistance, able to <ul style="list-style-type: none"> construct 3-D objects use 3-D objects to represent a spaceship 	<input type="checkbox"/> chooses and uses appropriate strategies to <ul style="list-style-type: none"> construct 3-D objects use 3-D objects to represent a spaceship 	<input type="checkbox"/> chooses and uses effective strategies; may offer more than 1 solution to <ul style="list-style-type: none"> construct 3-D objects use 3-D objects to represent a spaceship
Communication <ul style="list-style-type: none"> explains his or her reasoning and procedures clearly 	<input type="checkbox"/> unable to explain his or her reasoning and procedures	<input type="checkbox"/> partially explains his or her reasoning and procedures	<input type="checkbox"/> explains his or her reasoning and procedures clearly	<input type="checkbox"/> explains his or her reasoning and procedures clearly, confidently, and with some precision

Assessment Master 5

Geometry Rubric

This chart can be used to make decisions about children’s achievement of unit outcomes.

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
<p>Conceptual understanding</p> <ul style="list-style-type: none"> shows understanding by: <ul style="list-style-type: none"> – sorting, describing, comparing, and constructing objects and shapes – recognizing that a given 2-D shape or 3-D object can have different dimensions and orientations (e.g., a triangle can be any size or orientation and still be a triangle) – finding 3-D objects in the environment – relating 2-D shapes to 3-D objects 	<p><input type="checkbox"/> shows little or no understanding that:</p> <ul style="list-style-type: none"> – 3-D objects and 2-D shapes have multiple attributes that can be used to sort, describe, compare, and construct them – a given 2-D shape or 3-D object can have different orientations and dimensions – 3-D objects are part of our everyday environment – 3-D objects have parts similar to 2-D shapes 	<p><input type="checkbox"/> shows partial understanding that:</p> <ul style="list-style-type: none"> – 3-D objects and 2-D shapes have multiple attributes that can be used to sort, describe, compare, and construct them – a given 2-D shape or 3-D object can have different orientations and dimensions – 3-D objects are part of our everyday environment – 3-D objects have parts similar to 2-D shapes 	<p><input type="checkbox"/> shows understanding that:</p> <ul style="list-style-type: none"> – 3-D objects and 2-D shapes have multiple attributes that can be used to sort, describe, compare, and construct them – a given 2-D shape or 3-D object can have different orientations and dimensions – 3-D objects are part of our everyday environment – 3-D objects have parts similar to 2-D shapes 	<p><input type="checkbox"/> shows in-depth understanding, in varied contexts, that:</p> <ul style="list-style-type: none"> – 3-D objects and 2-D shapes have multiple attributes that can be used to sort, describe, compare, and construct them – a given 2-D shape or 3-D object can have different orientations and dimensions – 3-D objects are part of our everyday environment – 3-D objects have parts similar to 2-D shapes
<p>Procedural knowledge</p> <ul style="list-style-type: none"> identifies common attributes in a presorted set (2 attributes) identifies common attributes of triangles, squares, rectangles, circles, cubes, spheres, cones, cylinders, and pyramids sorts objects and shapes (2 attributes) names 2-D faces of a 3-D object 	<p><input type="checkbox"/> often makes major errors/omissions in:</p> <ul style="list-style-type: none"> – identifying common attributes (sorting rule) – sorting by 2 attributes – identifying common attributes of given 2-D shapes and 3-D objects – naming faces of a 3-D object 	<p><input type="checkbox"/> partially accurate; makes frequent minor errors/omissions in:</p> <ul style="list-style-type: none"> – identifying common attributes (sorting rule) – sorting by 2 attributes – identifying common attributes of given 2-D shapes and 3-D objects – naming faces of a 3-D object 	<p><input type="checkbox"/> generally accurate; makes few errors/omissions in:</p> <ul style="list-style-type: none"> – identifying common attributes (sorting rule) – identifying common attributes of given 2-D shapes and 3-D objects – sorting by 2 attributes – naming faces of a 3-D object 	<p><input type="checkbox"/> accurate; rarely make errors/omissions in:</p> <ul style="list-style-type: none"> – identifying common attributes (sorting rule) – identifying common attributes of given 2-D shapes and 3-D objects – sorting by 2 attributes – naming faces of a 3-D object
<p>Problem-solving skills</p> <ul style="list-style-type: none"> uses appropriate strategies to construct and represent given 3-D objects (e.g., with modelling clay) and 2-D shapes (e.g., geoboard, dot paper) 	<p><input type="checkbox"/> may be unable to:</p> <ul style="list-style-type: none"> – construct a given 3-D object – construct a given 2-D shape – represent a given 2-D shape pictorially 	<p><input type="checkbox"/> with some help, uses appropriate strategies to:</p> <ul style="list-style-type: none"> – construct a given 3-D object – construct a given 2-D shape – represent a given 2-D shape pictorially 	<p><input type="checkbox"/> uses appropriate strategies to:</p> <ul style="list-style-type: none"> – construct a given 3-D object – construct a given 2-D shape – represent a given 2-D shape pictorially 	<p><input type="checkbox"/> uses appropriate, often innovative, strategies to:</p> <ul style="list-style-type: none"> – construct a given 3-D object – construct a given 2-D shape – represent a given 2-D shape pictorially
<p>Communication</p> <ul style="list-style-type: none"> uses simple geometric language (e.g., <i>corner, curved, cube, circle</i>) 	<p><input type="checkbox"/> unable to describe shapes and objects</p>	<p><input type="checkbox"/> with prompting, partially describes shapes and objects; often vague</p>	<p><input type="checkbox"/> provides simple descriptions of shapes and objects</p>	<p><input type="checkbox"/> provides clear and often specific descriptions of shapes and objects</p>

Name: _____ Date: _____

Assessment Master 4

Performance Task Rubric

Knowledge/Skills	Not Yet Adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> formulates questions that can be answered by collecting data interprets data to answer questions draws conclusions about the information presented in pictographs and concrete graphs 	<input type="checkbox"/> shows very limited understanding of data analysis; needs one-to-one assistance to: <ul style="list-style-type: none"> formulate appropriate questions interpret data draw conclusions from a graph 	<input type="checkbox"/> shows some understanding of data analysis; with prompting and support, able to: <ul style="list-style-type: none"> formulate appropriate questions interpret data draw conclusions from a graph 	<input type="checkbox"/> shows basic understanding of data analysis; able to: <ul style="list-style-type: none"> formulate appropriate questions interpret data draw conclusions from a graph 	<input type="checkbox"/> shows in-depth understanding of data analysis; independently able to: <ul style="list-style-type: none"> formulate appropriate questions interpret data draw conclusions from a graph
Procedural knowledge <ul style="list-style-type: none"> constructs a concrete graph using the cards provided constructs a pictograph using a symbol of his choice collects and organizes information using concrete objects, tallies, checkmarks, charts, or lists 	<input type="checkbox"/> Needs one-to-one help; frequent errors in: <ul style="list-style-type: none"> constructing a concrete graph constructing a pictograph collecting and organizing information 	<input type="checkbox"/> partially accurate; makes some errors in: <ul style="list-style-type: none"> constructing a concrete graph constructing a pictograph collecting and organizing information 	<input type="checkbox"/> generally accurate; may make a few minor errors in: <ul style="list-style-type: none"> constructing a concrete graph constructing a pictograph collecting and organizing information 	<input type="checkbox"/> accurate; very few or no errors in: <ul style="list-style-type: none"> constructing a concrete graph constructing a pictograph collecting and organizing information
Problem-solving skills <ul style="list-style-type: none"> makes and carries out a plan to gather, organize, and interpret data to answer a question or solve a problem of her own choice 	<input type="checkbox"/> needs one-to-one, step-by-step assistance to make and carry out an appropriate plan	<input type="checkbox"/> needs help to choose strategies; with limited assistance, able to make and carry out an appropriate plan	<input type="checkbox"/> chooses and uses appropriate strategies to make and carry out an appropriate plan	<input type="checkbox"/> chooses and uses effective strategies; independently able to make and carry out an effective plan; often innovative
Communication <ul style="list-style-type: none"> explains his reasoning and procedures clearly, using appropriate terms (e.g., <i>chart</i>, <i>data</i>, <i>pictograph</i>) 	<input type="checkbox"/> unable to explain his reasoning and procedures	<input type="checkbox"/> partially explains his reasoning and procedures	<input type="checkbox"/> explains his reasoning and procedures clearly	<input type="checkbox"/> explains his reasoning and procedures clearly, confidently, and with some precision

Name: _____ Date: _____

Assessment Master 5

Data Analysis Rubric

This chart can be used to make decisions about children's achievement of unit outcomes.

Knowledge/Skills	Not yet adequate (needs assistance)	Adequate (limited assistance)	Proficient	Excellent
Conceptual understanding <ul style="list-style-type: none"> shows understanding of data and graphs by: <ul style="list-style-type: none"> formulating questions that can be answered by collecting data interpreting data to answer questions drawing conclusions about the information presented in a graph describing attributes of concrete graphs and pictographs 	<input type="checkbox"/> shows very limited understanding; needs one-to-one assistance to: <ul style="list-style-type: none"> formulate questions interpret data to answer questions draw conclusions about the information in a graph describe attributes of concrete graphs and pictographs 	<input type="checkbox"/> shows some understanding; with prompting and support, able to: <ul style="list-style-type: none"> formulate questions interpret data to answer questions draw conclusions about the information in a graph describe attributes of concrete graphs and pictographs 	<input type="checkbox"/> shows basic understanding; able to: <ul style="list-style-type: none"> formulate questions interpret data to answer questions draw conclusions about the information in a graph describe attributes of concrete graphs and pictographs 	<input type="checkbox"/> shows in-depth understanding; independently able to: <ul style="list-style-type: none"> formulate questions interpret data to answer questions draw conclusions about the information in a graph describe attributes of concrete graphs and pictographs
Procedural knowledge <ul style="list-style-type: none"> collects and organizes data using concrete objects, tallies, checkmarks, charts, or lists constructs concrete graphs constructs pictographs 	<input type="checkbox"/> needs one-to-one help; makes frequent errors in: <ul style="list-style-type: none"> collecting and organizing data constructing concrete graphs constructing pictographs 	<input type="checkbox"/> partially accurate; makes some errors in: <ul style="list-style-type: none"> collecting and organizing data constructing concrete graphs constructing pictographs 	<input type="checkbox"/> generally accurate; may make a few minor errors in: <ul style="list-style-type: none"> collecting and organizing data constructing concrete graphs constructing pictographs 	<input type="checkbox"/> accurate; very few or no errors in: <ul style="list-style-type: none"> collecting and organizing data constructing concrete graphs constructing pictographs
Problem-solving skills <ul style="list-style-type: none"> gathers and interprets data to answer questions solves a given problem by constructing and interpreting a concrete graph or pictograph 	<input type="checkbox"/> needs one-to-one, step-by-step assistance to: <ul style="list-style-type: none"> gather and interpret data to answer questions solve problems by constructing and interpreting graphs 	<input type="checkbox"/> needs help to choose strategies; with limited assistance, able to: <ul style="list-style-type: none"> gather and interpret data to answer questions solve problems by constructing and interpreting graphs 	<input type="checkbox"/> chooses and uses appropriate strategies to: <ul style="list-style-type: none"> gather and interpret data to answer questions solve problems by constructing and interpreting graphs 	<input type="checkbox"/> chooses and uses effective strategies; often innovative; may add complexity to assigned tasks; independently able to: <ul style="list-style-type: none"> gather and interpret data to answer questions solve problems by constructing and interpreting graphs
Communication <ul style="list-style-type: none"> explains her reasoning and procedures clearly, using appropriate terms (e.g., <i>graph</i>, <i>data</i>) 	<input type="checkbox"/> unable to explain her reasoning and procedures	<input type="checkbox"/> partially explains her reasoning and procedures	<input type="checkbox"/> explains her reasoning and procedures clearly	<input type="checkbox"/> explains her reasoning and procedures clearly, confidently, and with some precision