

Unit	<p style="text-align: center;"><b>4th: Unit 9- Shape and Number Patterns</b></p> <p style="text-align: center;"><b>Math Investigations: Penny Jars and Plant Growth</b></p> <p style="text-align: center;"><b>Standards for Grade 4</b></p> <p><u>UNIT 1</u>= Addition and Subtraction of Large Numbers <u>UNIT 2</u>= Facts, Factors, and Multiples <u>UNIT 3</u>= Measurement, and Relationships in Geometry <u>UNIT 4</u>= Multiplication &amp; Division Properties and Strategies <u>UNIT 5</u>= Comparison and Operations with Fractions <u>UNIT 6</u>= Decimals <u>UNIT 7</u>= Multiplication and Division with Large Numbers <u>UNIT 8</u>= Units of Measurement <u>UNIT 9</u>= Shape and Number Patterns</p>
9	<p><b>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</b></p>
9	<p><b>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i></b></p>
9	<p><b>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</b></p>
9	<p><b>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</b></p>
9	<p><b>4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), 3, 36), ...</i></b></p>
9	<p><b>4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{8}</math>). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i></b></p>