

Unit Name	Investigations	Sessions	Main Math Ideas	Assessments
Unit 4- MEASURING AND CLASSIFYING SHAPES <i>2-D Geometry and Measurement</i>	1-4	22 Approx. 22-24 days		Checklists, Games Quizzes and Unit Test
<p>4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p> <p>4.OA.A.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.</p> <p>4.NBT.B.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>4.NBT.B.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.</p> <p>4.MD.A.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. 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)</p> <p>4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p> <p>4.MD.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</p> <p>4.MD.C.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.</p> <p>4.MD.C.5a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles.</p> <p>4.MD.C.5b An angle that turns through n one-degree angles is said to have an angle measure of n degrees.</p> <p>4.MD.C.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>4.MD.C.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p> <p>4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>4.G.A.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p> <p>4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry</p>	<p>1- LINEAR MEASUREMENT</p> <p>2- SORTING AND CLASSIFYING PLYGONS</p> <p>3- MEASURING ANGLES</p> <p>4- SYMMETRY AND AREA</p>	<p>1.3– 1.5</p> <p><i>*Sessions 1 & 2 taught in Q4</i></p> <p><i>*Combine sessions 3 & 4</i></p> <p>2.1 – 2.5</p> <p>3.1 – 3.4</p> <p>4.1 – 4.6</p> <p><i>*Sessions 3 & 4 Optional</i></p>	<p>Solving measurement problems</p> <p>Describing & classifying 2-D figures</p> <p>Describing & measuring angles</p> <p>Describing and measuring angles</p> <p>Understanding & determining area</p> <p>Identifying mirror symmetry in shapes</p>	<p>A22-A23 Solving Measurement Problems Sessions 1.3, 1.4, 1.5</p> <p>Quiz 1 A24–A25 Session 1.5</p> <p>A26 Different Types of Quadrilaterals Session 2.5</p> <p>A27 Determining Angle Size Sessions 3.2, 3.3, 3.4</p> <p>Quiz 2 A28–A29 Session 3.4</p> <p>A30 Assessment Checklist Sessions 4.3, 4.4 and 4.5</p> <p>Quiz 3 A31–A32 Session 4.5</p> <p>A33 Area and Angles Session 4.6</p> <p>UNIT 4 TEST</p>