

Elements	US Algebra	US Measuring Angles	Japan Inequalities	Japan Area of Triangle
1. <u>Know</u> Lesson Content Math Tasks How Related	Content-Order of Operations; Integers; Exponents; Math Tasks-Manual and Calculator Computations	Complementary; Supplementary; Vertical; Right angles; Observe sum of angles; Seat work; Not very cohesive; Related in that they are all sum of angles	Review homework; Communicate problem; Practice solutions and present; Present Algebraic equation for inequalities; Independent practice of add'l problems	Area of a triangle between parallel lines; Understanding base and area of a quadrilateral; Recognizing a pentagon from triangle
2. <u>Work</u> Parts of Lesson Sequence Why Sequenced How related	Sequence-Practice Problems; Teacher demo and discussion; followed by independent practice No real connections relative to sequencing	No scaffolding of concepts; Poor sequencing; Started introducing several concepts such as vertical, complementary, supplementary, and right angles; Observe basic addition, and angles listed on the board; Seat work; Introduced a new formula for sum of all angles	Compare/Review h.w.; Understand and communicate problem; Learn methods to solve problem; Present solutions; Consider other methods; Summarize concepts; Independent practice of follow-up equations	Previous lesson review; Introduce problem to solve in practical terms; Individual practice w/ teacher obs. & feedback; Discuss findings; Present solutions; Review methods; Summarize lesson
3. <u>Work</u> Teacher role Questions Teacher info.	Role-Observer; Facilitator; Demonstrator	Rapid questioning; Open ended questions; Prompt recall; Completing computations at the board	Communicate learning needs; Communicate methods; Engages and invites positive interaction	Review previously learned material; Present problem; Individual Practice/Group work; Teacher review, validate student presentations, provides frequent feedback
4. <u>Work</u> Student role What doing	Complete assigned problems with accuracy; Work quietly	Choral responses; One word answers; Observe computations; Add angles for complementary, supplementary, or vertical problems	Review h.w. concepts; Consider new problem and methods to solve; Present methods; Understand calculations; Independent practice of follow-up problems	Active engagement; Interact with both teacher and peers; Apply previously learned concepts; Individual practice; Collaboration; Present solutions and explain; Review methods and
5. <u>Know</u> Teacher goal What to learn	Remain on task; Work quietly to solve assigned problems	Explain four different angles; Demonstrate sum of angles for the four discussed; Observed student practice problems and offered individual assistance to some	Student comprehension and evaluation of problem using algebraic equation and set-up for inequalities	Area of a triangle; Concepts of a quadrilateral, and area of a triangle; Make connections to apply lesson from previous day to new problem

<p><u>6.Know</u> What students learn from lesson</p>	<p>Students learned to follow steps to solve problems; Some students could recall or recite the steps during the lesson</p>	<p>Sum of given angles to add to 180; Sum of all angles in a shape</p>	<p>How to comprehend, set up, and use algebraic equation to solve a word problem</p>	<p>Multiple ways to solve a problem; Application of concepts and skills on area, triangles, &amp; parallel lines</p>
--	---	--	--	--