

Grade 3	Lesson: 11-9 Problem Solving: Make a Test Generalization	Reference to English
Math Standard(s): 3.G.1		Domain: Geometry
Content objective(s):		Language Objective(s):
Students will identify commonalities among objects or situations to make the test generalizations. <i>我会认出物体的相同点然后做归纳。</i>		Students will explain similarities and differences between polygons. <i>我会解释多边形的相同和不同点。</i>
Essential Understanding Commonalities in attributes of objects or situations can be found and used to make and test generalizations about relationships.		Required Academic Vocabulary for Word Wall: Listen: Read: Write: Speak: Sentence Frame:
Materials: • Guided and Independent Practice		Additional Lesson Vocabulary:
Lesson:		Instructional Time: 30 – 35 minutes
Opening: (5 minutes) <ul style="list-style-type: none"> Review polygons and how to group/sort them. Review describing shapes by attributes. T: “今天你会学习怎么把多边形归纳成一组。” <ul style="list-style-type: none"> Review the definition of “generalization” T: “你会不会觉得有些老师都一样？告诉你旁边的同学他们哪里一样。” T: “他们哪里一样？” T: “我们来比较老师。” <ul style="list-style-type: none"> Make a list of the teachers (both similarities and differences) Introduction to New Material (Direct Instruction): (6 minutes) <ul style="list-style-type: none"> Use page 294B from the Teachers’ Manual T: “长方形都一样吗？” T: “我们来看白板上的多边形，它们哪里一样，哪里不一样？告诉你旁边的同学。” T: “它们哪里不一样？它们哪里一样？” Guided Practice: (7 minutes) <u>Use the modeling cycle:</u> Teacher Does: <ul style="list-style-type: none"> Done in Direct Instruction 1 Students Does with Teacher: 2 Students Do: All Students Do: T: “与一个同学写下一个问题来帮助你归纳一组多边形，并画出那组多边形，然后把你画的跟另一组交换并解答。” Independent Practice: (6 minutes) T: “我们来看 294 页的第 1 题。做出多边形的归纳然后跟旁边的同学分享。” <ul style="list-style-type: none"> Continue with problems 2,5,6,7. Closing: (6 minutes) <ul style="list-style-type: none"> Do 2 problems from page 295 of the textbook as a class. 		
Assessment:		
Guided and Independent Practice		