DIXIE STATE COLLEGE – DEPARTMENT OF EDUCATION
LESSON PLAN - SECONDARY

Teacher Candidate Brianna Larmore Grade Level 8 Subject/Content: Math Unit 6

Title 6.3 – Classifying Triangles

CONTEXTUAL FACTORS (e.g. ethnicity, gender, exceptionalities, ELL, GATE, etc.) which need differentiation in instruction and assessment.
• 6 Hispanic students (2 have language difficulties) • 3 Honors – Bound students (2 others have ability but lack confidence) • 5 students with IEPs (learning disabilities)

WALK-AWAY (what do I want students to know, understand, and be able to do?)	
Content Walk-Away: • Rearrange angles of a triangle in order to discover the underlying principle that the sum of the measures of a triangle equal 180˚, or a straight line. • Classify triangles based on the number of equal sides and angles it contains. • Use classifications of triangles to deduce algebraically the measures of a missing angle. Reading/Language Walk-Away: • Equilateral: 3 equal sides, 3 equal angles • Isosceles: 2 equal sides, 2 equal angles ('bottom' of the two equal sides, base angles) • Scalene: no equal sides, no equal angles • Acute: all angles measure less than 90˚ • Right: one angle equals 90˚ • Obtuse: one angle measures greater than 90˚	

ASSESSMENT EVIDENCE (formative/summative checks for learning) **(Match the Content Walk-Away)**	**Modifications/Accommodations** (ELL, IEP, GATE, etc.)
Participation: • Creation of paper triangle, labeling its angles, and rearranging said angles into a line • Call on students semi-randomly to provide assistance and answer open-ended questions • Match vocabulary terms to specific pictorial references (have students come to the board and label objects themselves.) • Involve all students. In classwork: • Students answer open-ended questions specific to what they and their partner are working on together. • Observations of students assisting peers while in small groups/pairs. Homework: • PLC created common assessment • 30 total problems: 15 classifying only, 9 solve algebraically for a missing angle, and 6 to maintain skills from previous units	• Allow ELL students to converse in native tongue while working in small groups/pairs. • Insist on deeper answers from honors-bound students. Have them answer the "but why…?" and "why would that matter?" questions. • Scaffold students with an IEP, but don't let them off the hook. Verbally walk them through their own thinking.

ACTIVE LEARNING PLAN	**Modifications/ Accommodations** (ELL, IEP, GATE, etc.)
<u>Activate Prior Knowledge/Experiences</u> • Today we are going to take what we know about angles and expand that information to include triangles. <u>Focus Lesson ("I do it")</u> • Cut 1 triangle of your own. It can be wide, skinny, big, try not to go super tiny. **Encourage students to make a triangle that looks different from their neighbors'.** • Label each angle of your triangle 1, 2 ,3 • Cut the angles apart and place angles next to each other. • Have students compare their angle groupings to those of their neighbor. **They should all be straight lines.** <u>Guided Instruction ("We do it")</u> • Have students try to deduce what each new vocabulary word means. • Have them look at the pictures, and recall what they have already learned in previous classes about triangles. • Classifications: ▪ Equilateral: 3 equal sides, 3 equal angles ▪ Isosceles: 2 equal sides, 2 equal angles ('bottom' of the two equal sides, base angles) ▪ Scalene: no equal sides, no equal angles ▪ Acute: all angles measure less than 90˚ ▪ Right: one angle equals 90˚ ▪ Obtuse: one angle measures greater than 90˚ <u>Collaborative/Cooperative ("You do it together")</u> • Have students identify and classify various triangles around the classroom. ▪ The wall, ceiling and American flag ▪ The sides and diagonal of the Smart Board ▪ Have them find or mention of few of their own • Students work in pairs to solve the even problems 2-14. <u>Independent ("You do it alone")</u> • The odd problems and back of the worksheet are to be finished alone at home. <u>Summarization/Closure</u> • Sum of interior angles of ANY triangle is 180˚ • Equilateral triangles have all equal sides and all equal angles. • Isosceles triangles have two equal sides and two equal "base" angles • Scalene triangles have no equal sides nor equal angles	• Include IEP learners after a peers' example has been given. Use color-coding and visual representations. • Separate honors-bound students and have them collaborate with middle range peers. The peer tutoring will cement their knowledge of the content. • For ELL, speak slowly. Refer new vocabulary to information and terms they are already familiar with. Ask them for personal examples of interior, exterior, etc.

NOTES TO TEACHER
What do I need to remember to do? • Allow students to move angles around for a while. Let them see the relationship themselves if possible. • They know some of this information already, they just need a refresher on which one deals with sides and which with angles *Materials to have ready?* • Scissors (class set) • Bright colored paper • Smart Board / PowerPoint Presentation and projector • WS 6.3 • Dry Erase markers *Approximate time needed for lesson?* 70 minutes