**Integrated II Unit 8: Triangle Congruence and Proof**

**Universal Essential Question: Why is resilience an influence on success?**

**Content Essential Question: How does adaptation play a role in resilience?**

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| **Learning Objectives**  At the completion of this unit, I should … | **Self-Rating, evidence from my INB and practice papers**  0 – I have no idea.  1 – I cannot solve problems yet but I am beginning to understand the strategies  2 – I can solve problems but do not yet know why the math works.  3 – I understand why the math works and can solve most problems but still make mistakes.  4 – I understand why the math works and can consistently and accurately solve problems. | | |
| **Know**   * The formats of proofs * The properties of equality and congruence * Vocabulary of geometry |  |  |  |
| **Be able to**   * Make valid conclusions based on a chain of conditional statements. * Use a flowchart to prove statements. * Write proofs involving congruent triangles. * Write flowchart, two-column, and   paragraph proofs.   * Write proofs involving quadrilaterals. |  |  |  |
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| **Understand**   * What constitues a mathematical argument? |  |  |  |

**Vocabulary of congruence and proof**

Proof

Reasons

Given

Flowchart

Two column

Hypothesis

Conditional

Statement

Paragraph

Properties of Equality: addition, subtraction, division, multiplication, symmetric, reflexive, transitive

Properties of Congruence: symmetric, reflexive, transitive

**Reflection page**

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| Areas of success for this unit and justification | Areas that need more practice and/or deeper understanding, justification, and specific goals to achieve complete mastery |

How does the mathematics we studied in this unit relate to the content and universal essential questions? Be specific by providing evidence from your learning activities for the unit.