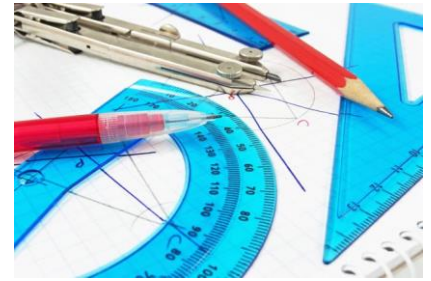# Geometry Unit 1A *Logical Argument and Constructions: Proof & Congruence*

Our Learning Goals:

We will…

- ✓ find and compare lengths of segments and measures of angles.
- ✓ identify special angle pairs and use their relationships to find angle measures.
- ✓ make basic constructions using a straightedge and a compass.
- ✓ use inductive reasoning to make conjectures.
- ✓ recognize conditional statements and their parts.
- ✓ write converses, inverses, and contrapositives of conditionals.
- ✓ write biconditionals and recognize good definitions.
- ✓ use the Law of Detachment and the Law of Syllogism.
- ✓ connect reasoning in algebra and geometry.

Why do we study this?

- ❖ Reasoning helps us to take information, analyze and process that information, and then use that information to solve problems.
- ❖ Parallel lines and angles are used in construction projects related to streets, homes, businesses, and other city structures.

How we will show what we have learned…

Formative Assessments	Summative Assessments
Ongoing formative assessments during lesson & homework activities will help in monitoring learning and providing feedback for students.	Summative assessments to measure learning at the end of concepts will include the following: - Test: Tools of Geometry - Test: Reasoning and Proof - Unit 1A Exam (District-wide)

Sample Problem:

All smiling cats talk. The Cheshire Cat smiles. Therefore, the Cheshire Cat talks. Is this statement valid or invalid? Explain your reasoning.

Additional Support:

- Check the teacher web page and Canvas page for notes, activities, and assignments.

- Search the topic on the web. We recommend using Khan Academy.

- Attend tutorials.

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Questions? Please contact your Math teacher.

We are looking forward to a great year!

--Your EM-S ISD Geometry Team