## Ms. Edwards ♣2017-2018 ♣ A Day Schedule ♣ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_♣ Block: \_\_\_\_\_

**Geometry Honors Unit 1 Reasoning & Proof**

**HOMEWORK POLICY:** *In order to receive a 3, you must do the following (.5 off for each objective not completed):*

1. Write your name and date along with the assignment in the top margin. All of your work must be done in pencil or a black pen.
2. Copy the problem & picture. Your pictures should verify your answers. (I should see angle measures, ≅ marks, etc.)
3. Every problem must be attempted to the best of your ability. Use the internet if you have problems understanding.
4. All algebraic work must be shown, and it should be neat and organized (hint: circle or underline your answers).
5. All worksheets should be checked and fully corrected using a red pen before coming to class. Go to **cindyedwards.weebly.com.**
6. ***Finally, assess your understanding by filling in the shaded section before coming to class.***

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| **DATE** | **OBJECTIVES**  | **HOMEWORK ASSIGNMENT** | **GRADE** |
| Tuesday, Sept. 5**Day 1** | * Introduction to Geometry Honors
* Introduction to Ms. Edwards’ Expectations
* Sign up for REMIND
* 2-1 Inductive Reasoning and Conjecture
 | 2-1 Practice Worksheet |  |
| Get Organized: ***Get your binder, paper, graph paper, & dividers!***Fill out the full information sheet & get it signed by your parent!  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Thursday,Sept. 7**Day 2** | * 2-2 Logic, Conjunction, and Disjunction
* Truth Tables and Venn Diagrams
 | 2-2 Practice Worksheet |  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Monday,Sept. 11**Day 3** | * 2-3 Conditional Statements
* Biconditional Statements
 | 2-3 Conditional and Biconditional Statements Worksheet  |  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Wednesday,Sept. 13**Day 4** | * 2-4 Deductive Reasoning
* ***CAV CONNECTION – ADJUSTED SCHEDULE***
 | 2-4 Deductive Reasoning Worksheet |  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Friday,Sept. 15**Day 5** | * 2-6 Properties of Real Numbers
* Algebraic Proof
 | 2-6 Algebraic Proof Worksheet |  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Tuesday,Sept. 19**Day 6** | ***Geometry Pre-Assessment*** | IXL Review: **(do at least 3 from I.1 through I.8)** |  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Thursday,Sept. 21**Day 7** | * Unit 1 Test Review
* ***PTSA OPEN HOUSE TONIGHT!***
 | Unit 1 Test Review Worksheet |  |
| ***Learning Target?***  | ***Emoji*** | ***What Questions do you still have?***  | ***What were your AHA Moments?*** |
| Monday,Sept. 25**Day 8** | * **Unit 1 Test**
 | **UNIT 1 TOTAL POINTS:** |  |

**Unit 1: Reasoning & Proof**



**LEARNING TARGETS: These are the skills you must know by the Unit Test**

**Target 1:** Students will be able to make conjectures based on observed information and determine whether or not a conjecture can be proven false using a counterexample.

**Target 2:** Students will be able to use conjunctions and disjunctions to create and interpret Venn Diagrams.

**Target 3:** Students will be able to write conjunctions, disjunctions and conditional statements in symbolic form and create truth tables based on the symbolic notation.

**Target 4:** Students will be able to determine the difference between the Law of Detachment and the Law of Syllogism and use the Laws to determine whether an argument is logically valid.

**Target 5:** Students will be able to use the algebraic and real number properties to complete Algebraic Proofs.

**ENDURING UNDERSTANDING: Reasoning leads to logical conclusions.**

1. Truth is determined by given information and related facts
2. A logical argument consist of a series of true statements that are given in order to reach a valid conclusion.
3. Complex situations can be resolved by breaking them into individual parts.

**ESSENTIAL QUESTIONS: How can the truth be determined?**

1. How is being able to think logically and form true conclusions useful in real life?
2. What tools are available to form valid conclusions?
3. What is the advantage of representing logical statements symbolically?

**SOL Objectives (2009):**

**G.1 The student will construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include**

a) identifying the converse, inverse, and contrapositive of a conditional statement;

b) translating a short verbal argument into symbolic form;

c) using Venn diagrams to represent set relationships; and

d) using deductive reasoning, including the law of syllogism.

**Virginia Beach Objectives:**

**GH.RL.1.1** The student will diagram arguments involving quantifiers using Venn Diagrams, identify the hypothesis and conclusion of a conditional statement (including statements involving quantifiers such as all, no, none and some) and write it and its converse in

*if-then* form. **(SOL G.1 a, c)**

**GH.RL.1.2** The student will construct and judge the validity of a logical argument consisting of a set of premises and a conclusion, including: being able to define and state the converse, inverse, and contrapositive of an if-then statement; translating short verbal arguments into symbolic form; using truth tables to assess the validity of compound statements; and use valid forms of inductive and deductive reasoning to include applications in Science, Technology, Engineering and Mathematics (STEM). **(SOL G.1 a, b, d)**

**GH.RL.1.3** The student will justify statements using properties of equality and problem solving techniques

in algebraic proofs. **(SOL G.1d)**