

# LESSON PLAN

Lesson #: 30

Unit#: 1 Module 14

Warmup: Phones away!!! Chromebooks out!!!

Attendance: Your attention is appreciated!!!

OLD TOPICS: [CONGRUENT TRIANGLES](#) ([Examples](#))

CLASSWORK 1: **FINISH 14.1-14.3** (LATE PENALTY APPLIES)

NEW TOPIC: **Arguments & Proofs** (70 minutes)

GOALS: LEARN TO PROVE ASSERTIONS IN MATH (GEOMETRY)  
LEARN ASSOCIATED TERMINOLOGY  
LEARN & PRACTICE TWO-COLUMN PROOFS

Standards: NC.M2.G-CO.7, NC.M2.G-CO.8

You **argue** a **premise** to prove or disprove it. Scientists, using **inductive** methods, offer theories and run experiments that support or contradict a theory. Theories are probable not certain. Math seeks definitive proof via **deductive reasoning**. Such an argument, offers statements and justifications instead of data and empirical evidence. We have..."**proof** n. a sequence of statements, each of which is either validly derived from those preceding it or is an axiom or assumption, and the final member of which, the **conclusion**, is the statement of which the truth is thereby established." - *The Harper Collins Dictionary of Mathematics* **Axioms** are...assumptions. It's not so much that they don't *require* proof, it's that they can't be proven...In geometry, "Axiom" and "**Postulate**" are essentially interchangeable. A **theorem** is a logical consequence of the axioms. [Axiom, Corollary, Lemma, Postulate, Conjectures and Theorems](#)

Video: [2 COLUMN PROOF-Longer](#) [2 COLUMN PROOF-Shorter](#)

Classwork: Worksheet (work in pairs if you wish)

Homework: **Reveal 14.4 / 14.5**

Questions: Your Turn!!!

**Bell:**

**Have a nice day!!!**