



**WOODRIDGE**  
SCHOOL DISTRICT 68

## **Gifted ELA/SC/SS Unit 4**

### **Argumentative Literacy & Philosophy; Data Analysis & Argument in Chemistry**

*In this unit, students will focus on argument structure and perform in standard debate formats. Students will analyze the data gathered through both experimentation and research to serve as the evidence for a scientific claim.*

#### **Priority Standards**

**RL 8.5:** Compare and contrast the structure of 2+ texts & analyze how the differing structure of each text contributes to its style & meaning.

**RI 8.9:** Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation

**RI 9.9:** Analyze seminal US documents of historical and literary significance, including how they address related themes and concepts.

**SL 8.3:** Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.

**SL 8.4:** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.

**SSH 7.9-12:** Identify the role of individuals, groups, and institutions in people's struggle for safety, freedom, equality, and justice.

**HS-PS1-5:** Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.

**HS-PS1-7:** Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

**MS-PS1-2:** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

**MS-PS1-6:** Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.



## Argumentative Literacy & Philosophy and Data Analysis and Argument in Chemistry

### Big Ideas

By understanding persuasive language, audience need, and author point of view, argument can be effectively structured.

Argument can be “won” when presented in debate format.

Scientists use their own data and the data of others to analyze the answer to their testable question and formulate an argument for or against the existence of a causal relationship between variables

For an experiment based argument, scientists develop a claim that answers the tested question and use the qualitative and quantitative data collected as evidence to support their findings.

### Big Ideas

Argument	Persuasion	Counterclaim
Refutation	Rebuttal	Relevant
Debate	Primary	Secondary
Salient	Citations	Works Cited
Claim	Evidence	Support
Refute	Experimental Error	

### RWE & Summative

Students will participate in a debate.

Students will complete a lab analysis.