

**Chlorine Gas as a Chemical Weapon****Goal:** To examine the ethical dilemmas of creating and using chlorine gas as a chemical weapon.

**PART ONE:** Scientific Overview of Chemical Warfare

*Reading* Answer the questions on the back of the writing rubric.

Due tomorrow.

**PART TWO:** Haber *Movie* As you watch the movie, jot down any ideas/ answers you have to the ethical questions below. **Overall**

**Question:** Was Haber's decision to create chemical weapons for the Germans the 'right' thing to do?

**Guiding Questions to Consider:**

Are some weapons more unethical than others? For example, is it better to be shot/ blown up/ gassed than to be suffocated by chlorine gas?

Does a scientist serve his country or the world?

Does inaction, not making chemical weapons, carry the same responsibility as action? For example, if you could end a war with making chemical weapons, but failure to make them continues the war and death toll, then is the scientist who refused to make the weapons morally responsible for those deaths?

Are the countries who followed Haber by making their own chlorine gas performing unethical actions?

Scientific enterprise is intended to help mankind; so is inventing weapons a perversion of science?

Who has greater responsibility, the King or President OR the scientist?

### **PART THREE: Socratic Discourse**

6-8 students will be in an inner circle. This inner circle discusses their viewpoints about the overall question... Was Haber's decision to create chemical weapons for the Germans the 'right' thing to do?

The outer circle of students observe the inner circle. Students in the outer circle may not speak. Students in the outer circle jot down notes from the discussion. Students in the outer circle may write questions to be passed into the inner circle for questioning. **PART FOUR: Argumentative Writing**

Based on the reading, movie, and discussion, you must develop a clear perspective/answer to the overall question... Was Haber's decision to create chemical weapons for the Germans the 'right' thing to do? Argue your viewpoint with three supporting reasons.

Your writing sample should be set up as the following: ○ Introduction: Grab the reader's attention. Clearly state your perspective/ answer to the overall question ○ Body paragraph:

- Support your perspective/ answer with three supporting reasons. Make sure these reasons align with your viewpoint. Make sure you thoroughly described how these reasons relate to your viewpoint.
- Describe one opposing view someone might have in response to your viewpoint. Make a counterargument to this opposing view. (This shows that you are knowledgeable about both sides of an argument) ○ Conclusion: Restate your perspective and highlight your most important points.

Name: \_\_\_\_\_ Score: /17

### Chlorine Gas as a Chemical Weapon RUBRIC

Your typed or handwritten writing sample MUST be stapled to this rubric. If you asked the inner circle a question, staple the question to this rubric too.

0 POINTS	1 POINT	2 POINTS	3 POINTS
Reading Questions were not answered	Less than half of the reading questions were answered correctly	Most of the reading questions were answered correctly	All of the reading questions were answered correctly
You did not speak in the inner circle OR you did not ask the inner circle an openended question		You spoke in the inner circle OR you asked the inner circle an open ended question	
You did not pay attention during the Socratic dialogue OR you were disruptive during the Socratic dialogue	You were attentive during the Socratic dialogue BUT you did not respect other people's opinions	You were attentive and respectful during the Socratic dialogue.	
Your introduction/ conclusion did NOT clearly state your viewpoint on the overall questions		Your introduction/ conclusion clearly stated your viewpoint on the overall questions	
You did not support your viewpoint with any reasons.	You supported your viewpoint with one reason.	You supported your viewpoint with two reasons.	You supported your viewpoint with three reasons.
You did not describe an opposing viewpoint.	You described an opposing viewpoint, but did not make a counterargument for it.	You described an opposing viewpoint AND made a counterargument for it.	
Your essay had many grammatical errors, choppy flow, and did not grab the reader's attention.	Your essay had a few grammatical errors, somewhat choppy flow, and/or did not grab the reader's attention.	Your essay had little grammatical errors, somewhat choppy flow, and somewhat grabbed the reader's attention.	Your essay had little grammatical errors, good flow, and grabbed the reader's attention.

Name:

Open Ended Question for the Inner Circle:

### **Chemical Warfare Reading Questions:**

1. T or F Chemical weapons in the form of gas was used on a large scale before WWI.
2. Name three reasons why chlorine gas was a better weapon than the chemical agents used by the scientist before Haber.
3. Explain how Haber packaged the chlorine gas.
4. Although the chlorine gas was ‘successful,’ why did the Germans fail to take advantage of the massive hole left by the chlorine gas?
5. What two ‘accomplishments’ is Haber associated with?

*Modified from Educational Resources at the HaberFilm.com website by Lauren McCulloch, Whitehall High School, Michigan*