

## Worksheet 5-5— Lesson Plan

### Format

(adapted with permission)

Subject: **Chemistry**

Teacher: **Sligar, Kristy**

Lesson Name: **Safety Signs**

Location: **Centennial HS**

Class: **Chem A/B**

Unit Context: **Gasses**

Date: **3/10/09**

#### Activities

**Students will use information presented in previous lectures, labs and assignments to classify safety signs around the classroom, as specific gas laws, gas properties, kinetic theory of gasses or gas variables. The reason why the gas law was chosen must be stated.**

#### Big6™ Skills

**Using information and synthesis**

#### Idaho Science Standards

**11-12.C.1.2.3 Explain and interpret the key concepts of the kinetic molecular theory**

**11-12.C.1.3.1 Identify, compare and contrast physical and chemical properties and changes and appropriate computations**

Learning Context:

**Analysis**

Materials/Resources:

**Large safety signs posted around the room**

Evaluation:

**Students will compare their answers with 3 other students to compare and contrast their answers.**

Notes:

**See attached signs**

**Worksheet 5-5—  
Lesson Plan  
Format**

(adapted with permission)

<p>Subject: <b>Chemistry</b></p> <p>Lesson Name: <b>Gas Law Demonstrations</b></p> <p>Class: <b>Chem A/B</b></p> <p>Date: <b>3/10/09</b></p>	<p>Teacher: <b>Sligar, Kristy</b></p> <p>Location: <b>Centennial H.S.</b></p> <p>Unit Context: <b>Gasses</b></p>	
<p>Activities</p> <p><b>Students will find a lab demonstration that shows one of the gas laws or relationships and explain in a “Science Fair” format to other students/teacher.</b></p>	<p>Big6™ Skills</p> <p><b>Information Seeking – find a demonstration to do that relates to a gas law</b></p> <p><b>Location and access – find materials needed for their experiment</b></p> <p><b>Use of Information – doing the experiment and relating it to a specific gas law</b></p> <p><b>Synthesis – the science fair exhibit</b></p>	<p>Idaho Science Standards</p> <p><b>11-12.C.1.2.3 Explain and interpret the key concepts of the kinetic molecular theory</b></p> <p><b>11-12.C.1.3.1 Identify, compare and contrast physical and chemical properties and changes and appropriate computations</b></p>

Learning Context:

**Inquiry and Presentation**

Materials/Resources:

**Will depend on student findings**

**LiLI-D resource – use any data base on Library website – Proquest science journals**

Evaluation:

**Rubric of presentation of experiment**

**Written explanation of why experiment is a specific gas law**

**Bibliography showing source(s) for experiment must include a database entry**

Notes:



**Worksheet 5-5—  
Lesson Plan  
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(adapted with permission)

Subject: <b>Chemistry</b>	Teacher: <b>Sligar, Kristy</b>
Lesson Name: <b>Real world gas laws</b>	Location: <b>Centennial H.S.</b>
Class: <b>Chem A/B</b>	Unit Context: <b>Gases</b>
Date: <b>3/10/09</b>	

<p>Activities</p> <p><b>Using any crowd scenario (dance, football game, school lunch) write a story that explains 10 of the gas laws/kinetic properties using people as gas molecules.</b></p>	<p>Big6™ Skills</p> <p><b>Use of information – using a list of possible gas laws/kinetic properties, apply them to their crowd scenario.</b></p> <p><b>Synthesis – creating the story and scenario.</b></p> <p><b>Evaluation – teacher evaluation (possible rubric) was each of the 10 gas laws explained, does the scenario work.</b></p> <p><b>Student takes quiz by reading another student’s story and listing the 10 gas laws/properties that he/she thinks were used.</b></p>	<p>Idaho Science Standards</p> <p><b>11-12.C.1.2.3 Explain and interpret the key concepts of the kinetic molecular theory</b></p> <p><b>11-12.C.1.3.1 Identify, compare and contrast physical and chemical properties and changes and appropriate computations</b></p>
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Learning Context:  
Writing a story

Materials/Resources:  
Notes of from all the gas lectures  
List of gas laws/kinetic properties that students could choose 10 from

Evaluation:  
Possible rubric, possible check list – will be teacher evaluation  
Student Quiz (see above)

Notes: