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

<table>
<thead>
<tr>
<th>Activities</th>
<th>Big6™ Skills</th>
<th>Idaho Science Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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.</strong></td>
<td><strong>Using information and synthesis</strong></td>
<td><strong>11-12.C.1.2.3 Explain and interpret the key concepts of the kinetic molecular theory</strong></td>
</tr>
<tr>
<td><strong>Idaho Science Standards</strong></td>
<td></td>
<td><strong>11-12.C.1.3.1 Identify, compare and contrast physical and chemical properties and changes and appropriate computations</strong></td>
</tr>
</tbody>
</table>

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

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**Worksheet 5-5—Lesson Plan Format**  
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<table>
<thead>
<tr>
<th>Subject: Chemistry</th>
<th>Teacher: Sligar, Kristy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson Name: Gas Law Demonstrations</td>
<td>Location: Centennial H.S.</td>
</tr>
<tr>
<td>Class: Chem A/B</td>
<td>Unit Context: Gasses</td>
</tr>
<tr>
<td>Date: 3/10/09</td>
<td></td>
</tr>
</tbody>
</table>

**Activities**

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<tr>
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<th>Idaho Science Standards</th>
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<tbody>
<tr>
<td>Information Seeking – find a demonstration to do that relates to a gas law</td>
<td>11-12.C.1.2.3 Explain and interpret the key concepts of the kinetic molecular theory</td>
</tr>
<tr>
<td>Location and access – find materials needed for their experiment</td>
<td>11-12.C.1.3.1 Identify, compare and contrast physical and chemical properties and changes and appropriate computations</td>
</tr>
<tr>
<td>Use of Information – doing the experiment and relating it to a specific gas law</td>
<td></td>
</tr>
<tr>
<td>Synthesis – the science fair exhibit</td>
<td></td>
</tr>
</tbody>
</table>

**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:**

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*The Definitive Big6™ Workshop Handbook, page 78  
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<td>Unit Context: Gases</td>
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### Activities
Using video/stills or animations do a voice over explaining how a “real” world gas phenomena can be explained with gas variables, kinetic theory or gas laws

### Big6™ Skills
Use of Information – using lectures, labs and activities of gas laws and their own “real” world experiences, choose a phenomena that involves a gas.

Synthesis – voice over presentation.

### 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:
Discovery or Relating

### Materials/Resources:
Students will need pictures/clip art/video about their phenomenon
Voicethread.com

### Evaluation:
Rubric – including relationship/explanation of gas law/or variable, pictures/visual that explains the law

### Notes:
Must learn how to do voicethread before the I give this assignment

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*The Definitive Big6™ Workshop Handbook, page 78*

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

**Activities**
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.

**Big6™ Skills**
- Use of information – using a list of possible gas laws/kinetic properties, apply them to their crowd scenario.
- Synthesis – creating the story and scenario.
- Evaluation – teacher evaluation (possible rubric) was each of the 10 gas laws explained, does the scenario work.
- Student takes quiz by reading another student’s story and listing the 10 gas laws/properties that he/she thinks were used.

**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:**
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:**