### Lesson Plan Format
(adapted with permission)

<table>
<thead>
<tr>
<th>Subject: 7th Grade Science</th>
<th>Teacher: Heidi Maimer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson Name: Nervous System Catalog</td>
<td>Location: Vallivue Middle School</td>
</tr>
<tr>
<td>Class: 1, 2, 3, 4, 6, 7 Periods</td>
<td>Unit Context: Nervous System</td>
</tr>
<tr>
<td>Date: March 10, 2009</td>
<td></td>
</tr>
</tbody>
</table>

### Activities
1. **What are the parts and function of the brain?**
   - This unit will provide students with vocabulary and functions of the brain. Each student will then be provided with the knowledge necessary to evaluate the importance of the each part.

2. **Students will produce a brain catalog with an illustration, description of the function, value and justification of the value.**

### Big6™ Skills
1. **Student will design a brain catalog for a person who has a specific profession.** Such as an athlete, musician, doctor, etc. The catalog will contain pages that include descriptions, prices, and pictures of the part of the brain they are trying to sell. Student must include the frontal lobe, parietal lobe, occipital lobe, temporal lobes, cerebellum, cerebrum, pons, medulla oblongata, neurons, hypothalamus, and pituitary gland in their completed catalog. The prices of the brain parts must reflect the importance of that part of the brain to the person with that profession.

2. **Library: brain books, website books, online references**
   - Library- find nonfiction books in brain area, use computer with online resources, ebooks, websites, such as neuroscience for kids. Use computer lab to research and type catalog. Use webpath express to find relevant websites.

3. **Library – use Library catalog to find brain books, Scan chapters for brain parts and extract information.** Also, use textbook and notes to extract information.

4. **Student will then create a catalog with descriptions and graphics of each part of the brain as outlined in the Task Definition.** The student will put an appropriate price on each part depending on its importance to that particular person.

5. **Students will grade another student’s catalog with a scoring rubric given by the teacher.**

### Idaho Science Standards
7.S.1.1.2 Determine how small systems contribute to the function of the whole. (633.01.a)
7.S.1.2.3 Use models to explain or demonstrate a concept. (633.02.c)
7.S.1.6.3 Evaluate data in order to form conclusions. (634.01.d)

### Learning Context:
Student will learn the parts of the brain and their functions. The student must include the frontal lobe, parietal lobe, occipital lobe, temporal lobes, cerebellum, cerebrum, pons, medulla oblongata, neurons, hypothalamus, corpus collosum and pituitary gland in their completed catalog. The prices of the brain parts must reflect the importance of that part of the brain to the person with that profession.

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*The Definitive Big6™ Workshop Handbook, page 78*

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Materials/Resources:
Library: brain books, website books, online references
Library- find nonfiction books in brain area,
use computer with online resources, ebooks, websites, such as neuroscience for kids.
Use computer lab to research and type catalog.
Use webpath express to find relevant websites.

Evaluation: Each student will evaluate another student’s catalog. They will score the catalog using the following rubric:
Name:

Period:

Cover (5) ______
Back Cover (5) ______
Table of Con (5) ______
Page #’s (1) ______
Page 1 (7) ______
Page 2 (7) ______
Page 3 (7) ______
Page 4 (7) ______
Page 5 (7) ______
Page 6 (7) ______
Page 7 (7) ______
Page 8 (7) ______
Page 9 (7) ______
Page 10 (7) ______
Page 11 (7) ______
Page 12 (7) ______
Bonus Eye (7) ______
Bonus Ear (7) ______
Bonus Nose (7) ______
Bonus Mouth (7) ______
Bonus Hand (7) ______
Total = ________
**Worksheet 5-5—Lesson Plan Format**

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<table>
<thead>
<tr>
<th>Subject: 7th Grade Science</th>
<th>Teacher: Heidi Maimer</th>
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<tbody>
<tr>
<td>Lesson Name: Metrics and Your World</td>
<td>Location: Vallivue Middle School</td>
</tr>
<tr>
<td>Class: 1, 2, 3, 4, 6, 7 Periods</td>
<td>Unit Context: Metric System</td>
</tr>
<tr>
<td>Date: March 18, 2009</td>
<td></td>
</tr>
</tbody>
</table>

### Activities

1. Student will learn the prefixes used in the metric system and apply them to designing a structure.

2. This unit will provide students with vocabulary and meaning of the prefixes used in the metric system. Each student will then be provided with the knowledge necessary to design a structure using the following prefixes: kilo, hecto, deka, deci, centi, milli, Mega and nano.

3. Students will produce a structure such as a basic house or car using the correct prefixes to identify parts of the structure. For example: student will design a house with a roof that is 10 meters in length or a car that has tires that are 12 cm in diameter. Or a container that can hold 100 milliliters of water.

### Big6™ Skills

1. Student will design a structure such as a car or house to show mastery of the prefixes used in the metric system. The student will design a structure and label its pieces and parts to show knowledge of the correct terms to use to identify a length, mass or volume. Students will be required to use the prefixes mega, kilo, hecto, deka, milli, centi, deci, and nano. Meters, liters and grams must be used appropriately as well.

2. Students can look in the book for the definitions of the metric prefixes used in this unit. Teacher will also give definitions of the prefixes.

3. Student can use the following websites to make metric conversions from the English system to the metric system.


   Students may also use, ebooks and the lili data base in the library. Students may also use webpath express to find relevant websites.

4. Library – use Library catalog to find metric books, Scan chapters for measurement information. Also, use textbook and notes to extract information.

5. Student will then create structure identify the pieces and parts in metrics. Instead of using inches and feet or pounds and ounces the student will now use metric terminology.

6. Students will grade another student’s structure with a scoring rubric given by the teacher.

### Idaho Science Standards

7.S.1.2.3 Use models to explain or demonstrate a concept. (633.02.c)

7.S.1.6.3 Evaluate data in order to form conclusions. (634.01.d)

Items should address experimental design.

Students should be able to identify suitable forms of technology and mathematics needed to solve a problem presented in the question stem.

### Learning Context:

Student will learn the meaning of the prefixes used in the metric system. The students will then apply their newly gained knowledge to build a structure using the prefixes in the correct context.

### Materials/Resources:

*The Definitive Big6™ Workshop Handbook,* page 78

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Library: metric conversion books, website books, online references
Use computer with online resources, ebooks, websites,
Use computer lab to research
Use webpath express to find relevant websites.

Evaluation: Each student will evaluate another student’s structure. They will score the structure using the following rubric:
Name:
Period:
Appropriate Structure (10) ______

Did the structure include the following prefixes and used in the correct context:
Mega(5) ______
Kilo(5) ______
Hecto(5) ______
Deka(5) ______
milli(5) ______
deci (5) ______
centi(5) ______
nano(5) ______
Total = ________