

**Learning Objectives – “Students CAN...”**

1. Analyze new concept vocabulary – Vocabulary Enhancement (BW)
2. Chemistry 101: Periodic Table & Atomic Structures - Handout

**Assessment**

In-class completion of the notebook/bell work  
*Chemistry 101: Periodic Table & Atomic Structures - Handout*

**Homework**

1. **ALL results for science fair are due – 11/27**
2. Study/Memorize Periodic Table Elements (1-10) – 11/30
3. Complete NEW vocabulary – 11/26
4. Notebook Collections (Teacher’s Review)  
 1<sup>st</sup> & 7<sup>th</sup> – 11/27, 2<sup>nd</sup> & 6<sup>th</sup> – 11/28, 3<sup>rd</sup> – 11/29

Reminders / DO NOT COPY

**SCIENCE FAIR CALENDAR**

**Model notebook entries** can be found below at the Teacher’s NB. Use this resource to keep your notebook accurate.

**Bell work**

Using the vocabulary list provided at your seat: *Complete the five starred\* terms*

For each term on the list you may do one of the following:

- Copy
- Summarize
- Provide an example

**Incomplete or incorrect vocabulary will be scored accordingly.**

**No pictures – Text only**

*\*\*Vocabulary assignments must be complete prior to notebook assessments – please plan/prepare accordingly.*

**Linked Documents and Class Resource**

[Teacher’s NB 11/26](#)

[Atomic Structures Handouts & KEY](#)

[Vocabulary 8-1](#) ↓

[Periodic Table \(Printable\)](#)

**District Content Descriptor:**

Construct, use, and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon. (07-PS3-5)

Modeling in 6–8 builds on K–5 and progresses to developing, using and revising models to describe, test, and predict more abstract phenomena and design systems - **Develop a model to describe unobservable mechanisms.** (07-PS3-2)

Science Fair – Best Practices Modeling Sequence / Population & Behavior Studies

Fayette County  
 2018-19  
 District Content Map

**Learning Objectives** – “Students CAN...”

1. Current events in science – refine our reading practices, and increase vocabulary (BW)
2. Complete science fair power point presentation (IN-CLASS)

**Assessment**

In-class completion of the notebook/bell work  
*Complete science fair power point presentation (IN-CLASS)*

**Homework**

1. **Science Fair presentations – 11/29 & 11/30**
2. Study/Memorize Periodic Table Elements (1-10) – 11/30
4. Notebook Collections (Teacher’s Review)  
 2<sup>nd</sup> & 6<sup>th</sup> – 11/28, 3<sup>rd</sup> – 11/29

Reminders / DO NOT COPY

**SCIENCE FAIR CALENDAR**

**Model notebook entries** can be found below at the Teacher’s NB. Use this resource to keep your notebook accurate.

**Bell work**

Using good-practice reading techniques, read this week’s science article. When you finish reading, complete the article questions below.

1. **What was Coveyou’s childhood like? What did he do to escape?**
2. **Why did Coveyou use chemistry as the subject of his first game?**
3. **Why does Coveyou enjoy/value science?**
4. **Are there any challenges in your life that might be easier to overcome if you could practice them in a game?**

**Linked Documents and Class Resource**

[Teacher’s NB 11/27](#)

[Article: Chemist Invents Games](#)

[SCIENCE FAIR PP TEMPLATE](#)

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Science Fair – Best Practices Modeling Sequence / Population & Behavior Studies

Fayette County  
 2018-19  
 District Content Map

**Learning Objectives** – “Students CAN...”

1. Use critical thinking to solve a problem. (BW)
2. Complete science fair power point presentation (IN-CLASS)

**Assessment**

In-class completion of the notebook/bell work  
*Complete science fair power point presentation (IN-CLASS)*

**Homework**

1. **Science Fair presentations – 11/29 & 11/30**
2. Study/Memorize Periodic Table Elements (1-10) – 11/30
4. Notebook Collections (Teacher’s Review)

3<sup>rd</sup> – 11/29

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**SCIENCE FAIR CALENDAR**

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**Bell work**

Complete today’s challenge question in the notebook. When you finish, **record your answer on a small piece of paper and place it in the solutions chest at the front of the room.**

Using your periodic table handout draw a BOHR model of nitrogen in your notebook.

**How many electrons are in the outer-most (valence) energy ring?**

**Linked Documents and Class Resource**

[Teacher’s NB 11/28](#)

[SCIENCE FAIR PP TEMPLATE](#)

**District Content Descriptor:**

Patterns - Macroscopic patterns are related to the nature of microscopic and atomic-level structure. (07-PS1-2) Energy and Matter - Matter is conserved because atoms are conserved in physical and chemical processes. (07-PS1-5) - The transfer of energy can be tracked as energy flows through a designed or natural system. (07-PS1-6)

Modeling in 6–8 builds on K–5 and progresses to developing, using and revising models to describe, test, and predict more abstract phenomena and design systems - **Develop a model to describe unobservable mechanisms.** (07-PS3-2)

Science Fair – Best Practices Modeling Sequence / Population & Behavior Studies

Fayette County

2018-19

District Content Map

**Learning Objectives** – “Students CAN...”

1. Analyze and respond to the YouTube - Q Review. (BW)
2. Science Fair Presentations / Communicating Experimental Results (PP)

**Assessment**

In-class completion of the notebook/bell work  
*Science Fair Presentations / Communicating Experimental Results (PP)*

**Homework**

1. Science Fair presentations – 11/29 & 11/30
2. Study/Memorize Periodic Table Elements (1-20) – 12/7

Reminders / DO NOT COPY

**SCIENCE FAIR CALENDAR**

Model notebook entries can be found below at the Teacher’s NB. Use this resource to keep your notebook accurate.

**Bell work**

YouTube Science – Watch the video and respond to the questions below.

1. Why does the periodic table make more sense compared to our alphabet?
2. How did Mendeleev organize the elements that were known?
3. Why did he leave spaces in his version of the periodic table?



CRASH COURSE: PERIODIC TABLE

**Linked Documents and Class Resource**

[Teacher’s NB 11/29](#)

[Video: Crash Course – Periodic Table](#)

[Science Fair Presentation Scoring Rubric](#) ↓

[SCIENCE FAIR PP TEMPLATE](#)

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Science Fair – Best Practices Modeling Sequence / Population & Behavior Studies

Fayette County  
 2018-19  
 District Content Map

Date: November 30, 2018

School Day: 70

**Learning Objectives** – “Students CAN...”

1. Share ideas by writing a paragraph in their science journal. (BW)
2. **Science Fair Presentations / Communicating Experimental Results (PP)** or Quiz  
#12: Notebook Concepts and Labs

**Assessment**

In-class completion of the notebook/bell work  
*Science Fair Presentations / Communicating Experimental Results (PP)*

**Homework**

1. Students who have been selected for the school wide science fair will be provided a presentation board, and will need to create an appropriate display for the school wide fair – 12/5
2. Study/Memorize Periodic Table Elements (1-20) – 12/7

Reminders / DO NOT COPY

**SCIENCE FAIR CALENDAR**

**Model notebook entries** can be found below at the Teacher’s NB. Use this resource to keep your notebook accurate.

**Bell work**

Science Journal: Day 12

Complete a paragraph containing no less than five additional sentences that continue the lead below.

**The most incredible thing I have ever seen was...**

**Linked Documents and Class Resource**

[Teacher’s NB 11/30](#)

*Science Fair Presentation Scoring Rubric* ↓

[SCIENCE FAIR PP TEMPLATE](#)

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Patterns - Macroscopic patterns are related to the nature of microscopic and atomic-level structure. (07-PS1-2) Energy and Matter - Matter is conserved because atoms are conserved in physical and chemical processes. (07-PS1-5) - The transfer of energy can be tracked as energy flows through a designed or natural system. (07-PS1-6)

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Science Fair – Best Practices Modeling Sequence / Population & Behavior Studies

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2018-19  
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## Science Fair Presentation Rubric

Read the objective/descriptor then select the appropriate rating from the scale provided.

Question / Observation	Hypothesis	Data Collected	Summary / Conclusion	Appropriate Content
<ul style="list-style-type: none"> <li>• Solution is not obvious or simple common sense</li> <li>• Solution must require experimentation</li> <li>• Clear Identified dependent variable (Test variable)</li> <li>• Appropriate test trials – Result answers project question</li> </ul>	<ul style="list-style-type: none"> <li>• Prediction is related and appropriate based on the project question</li> <li>• Prediction is based on common sense logic – not wild/random guessing</li> <li>• Prediction contains an explanation supported by insightful reasoning, and personal experience</li> <li>• The expected result is clearly defined and can be measured</li> </ul>	<ul style="list-style-type: none"> <li>• The data has been thoughtfully prepared – using tables, graphs or graphic organizers</li> <li>• The data selected relates to the tested variables (dependent/independent)</li> <li>• Proper comparisons can be made based on trials completed</li> <li>• An appropriate graph has been created to summarize the data/results</li> </ul>	<ul style="list-style-type: none"> <li>• Data/results have been provided as evidence to answer the project question</li> <li>• Data/results have been provided as evidence to answer the hypothesis</li> <li>• The summary thoughtfully explains what has been learned</li> <li>• All statements made in the summary have been supported with numerical/data evidences</li> </ul>	<ul style="list-style-type: none"> <li>• Solution is not obvious or simple common sense</li> <li>• Project is creative, and inventive using authentic interest and relatable content</li> <li>• Participant has done research into the appropriate fields of science and understands the dynamics of the variables</li> <li>• The project has applicable value – answers a question of interest and has inherent worth to society</li> </ul>
<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
Participant met <b>ALL</b> objectives in this category	Participant met <b>ALL</b> objectives in this category	Participant met <b>ALL</b> objectives in this category	Participant met <b>ALL</b> objectives in this category	Participant met <b>ALL</b> objectives in this category
<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
Participant met <b>MOST</b> objectives in this category	Participant met <b>MOST</b> objectives in this category	Participant met <b>MOST</b> objectives in this category	Participant met <b>MOST</b> objectives in this category	Participant met <b>MOST</b> objectives in this category
<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Participant met <b>SOME</b> objectives in this category	Participant met <b>SOME</b> objectives in this category	Participant met <b>SOME</b> objectives in this category	Participant met <b>SOME</b> objectives in this category	Participant met <b>SOME</b> objectives in this category
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Participant <b>did not meet ANY</b> of the objectives in this category	Participant <b>did not meet ANY</b> of the objectives in this category	Participant <b>did not meet ANY</b> of the objectives in this category	Participant <b>did not meet ANY</b> of the objectives in this category	Participant <b>did not meet ANY</b> of the objectives in this category
<b>A / 25 – 23 = 250</b>	<b>B / 22 – 21 = 230</b>	<b>C / 20 – 19 = 208</b>	<b>D / 18 – 16 = 183</b>	<b>F / 15 and below = 160</b>