

Chemistry 5E Lesson BUNDLE

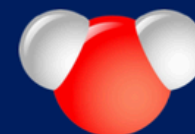
Engagement
Exploration
Explanation
Elaborate
Evaluate



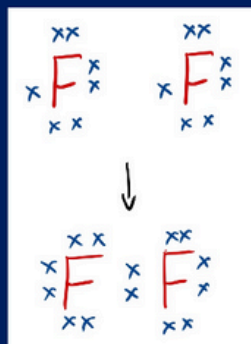
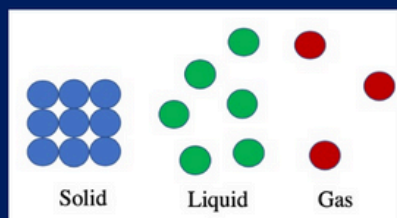
Includes 19 Chemistry 5E Lessons
Each 5E resource includes a teaching schedule, a lesson, and activities to engage your students.

Chemistry 5E Lesson

Bundle



The 5E model is a scientifically proven method to improve student engagement and learning in your classroom



- ✓ Engagement
- ✓ Exploration
- ✓ Explanation
- ✓ Elaborate
- ✓ Evaluate



Includes 19 Chemistry 5E Lessons
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Complete Teacher Instructions

The Periodic Table 5E Lesson

Grades 7-10, 12	The Periodic Table	Ongoing
Lesson Objective: Students will learn about: - The history of the periodic table - Element squares, including atomic number and atomic mass - Valence electrons - Metals/non-metals and metalloids - Groups and families - Periods - Elemental properties - Shielding - Trends in the periodic table - Atomic radius - Ionic radius - Ionization energy - Electronegativity		
Possible Student Misconceptions: - The elements in the periodic table are arranged by increasing - Low ionization energy means it is difficult to remove that elec - The periodic table was constructed using the atomic structure - Trends in the periodic table increase and decrease across a - Elements in the same period have similar characteristics.		
Materials: 1 device (smartphone, Chromebook, laptop, tablet, or compu - A means of projecting a PowerPoint presentation - Internet access - General classroom objects		
Teacher Notes: - All videos can be accessed directly from the PowerPoint. To icon while in slideshow mode and it will automatically open for reason, right-click on the image and click Edit Hyperlink or s - I've created a video walkthrough if needed. It can be accesse https://youtu.be/cCIKIP9SaDQ - I don't believe in long lessons. If you feel your students are lo Stop the PowerPoint and give them a 5-minute break. If you'r recommend my video collection here - http://www.teachwithtfw There are tons of brain-break videos to choose from all group		

The Periodic Table – 5E Lesson

Engagement Phase Your students will complete the Task Cards Activity. They may complete this in pairs or individually.	Teacher Notes: In this activity, students will answer questions and put them in order to reveal a mystery phrase.
Exploration Phase Exploration – Lab Station Activity In groups of 2-3, have your students complete Exploration – Lab Station Activity. Once they're done, they will submit their passport to you.	Teacher Notes: The complete instructions for my Lab Station activity can be found in the START HERE – Instructions file.
Explanation Phase PowerPoint Lessons - There are two lessons found in the folders – Explanation – Lesson and Worksheet and Explanation (Senior-Level) – Lesson. - These lessons are designed to be completed over two days - There are multiple embedded videos and plenty of opportunity to engage, interact, and check for your students' understanding throughout the lessons. - The lessons cover the following topics: - History of the periodic table - Atomic number and atomic mass - Valence electrons - Types of elements - Groups, families, and periods	

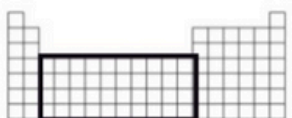
- Properties of elements - Shielding - Element trends - Atomic and ionic radii - Ionization energy	Goals ☐ Students develop understanding of the content ☐ Observations and experiences are discussed and critiqued ☐ Students develop vocabulary ☐ Students are able to connect the content presented to previous experiences
Teacher Notes: - All videos can be accessed directly from the PowerPoint. To retrieve them, click on the video icon while in slideshow mode and it will automatically open for you. If they don't open, right-click the image and select Edit Hyperlink or something similar. - I've created a video walkthrough if needed. It can be accessed here - https://youtu.be/cCIKIP9SaDQ - I have also enclosed a .PDF version of both the teacher and student versions	
Elaborate Phase Elaborate – Reading Your students will complete – Elaborate – Scavenger Hunt . This activity will require your students to move beyond what was covered directly in the lesson and allow them to further develop their understanding.	Duration: 1 hour Teacher Role – Facilitate learning and keep students focused Goal ☐ Students use their newly obtained knowledge to propose solutions and extend their learning to new situations
Teacher Notes: - Students will work individually or in small groups - Students will need one device per groups	
Evaluate Phase Quiz Have your students complete - Evaluate – The Periodic Table Quiz or Evaluate – The Periodic Table Senior-Level Quiz All quiz questions will come from the lesson, reading, and lab station activity.	Duration: 30 min Teacher Role – Distribute and collect evaluation Goal ☐ Students are given the opportunity to demonstrate their understanding and evaluate their own progress
Teacher Notes: - It's sometimes best to have the students peer evaluate - Placing students in small groups and having them exchange papers to mark will accomplish two things 1) Provide immediate feedback on the quiz they just completed 2) Significantly reduce your marking time - Peer evaluation is not needed, only suggested when appropriate	

Each phase is clearly described

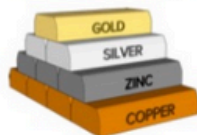
Complete Lessons

Transition Metals

- These are the metals you are most familiar with: copper, tin, zinc, iron, nickel, gold, and silver
- For many, their number of valence electrons is variable (changes)
- **They are good conductors of heat and electricity**



Assign transition metals a colour and use the second periodic table to colour it in. **Include it on your legend**



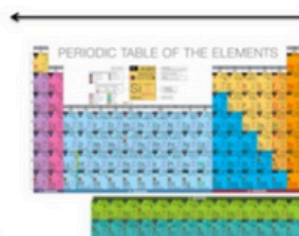
Properties of Metals

- _____
- Metals are shiny
- Metals are ductile (can be stretched into thin wires)
- Metals are malleable (can be pounded into thin sheets)
- A chemical property of metal is its reaction with water, which results in corrosion



Rows and Periods

- Elements in the periodic table are also grouped into rows or periods
 - The periods are numbered 1-7
- **Elements within a period do not share common characteristics**
 - This is because they each have a different number of valence electrons



Complete lessons that cover all required topic criteria
Student copies with blanks
Videos embedded right into your slideshow

TWF

Interactive and Engaging Activities

TWF

Device-Based Scavenger Hunt The Particle Theory

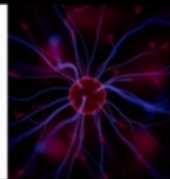
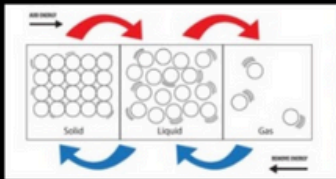


Includes

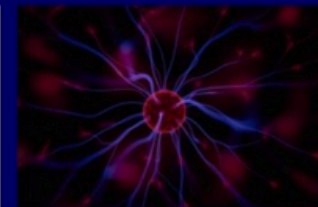
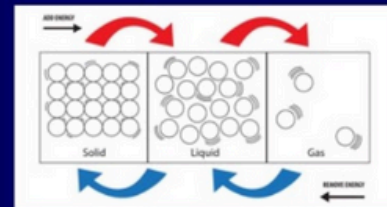
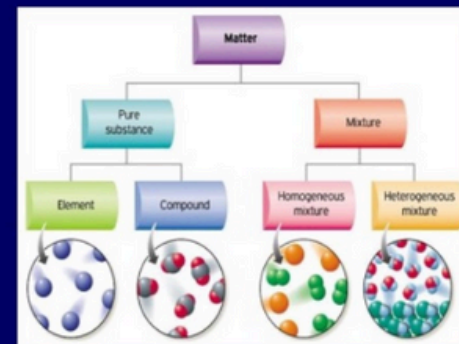
- 5 Unique Locations
- Online form submission
- Answer Key

Works on all smartphones, tablets, Chromebooks, and laptops

- **100% Digital**
- Simulations
- Quizzes
- Videos
- Games
- and more



The Particle Theory Lab Station Activity



7 Lab Station Activities to get your kids out of their seats and engaged in their learning

Get away from tired practices and unengaged students



Incorporate Technology and Increase Collaboration



click here
to START