

## 20-21 District Wide High School Science Priority Level 3 Learning Targets-Chemistry and SCI301

In response to the COVID-19 pandemic and changes to educational contexts, the following level 3 learning targets from the 20-21 Chemistry curriculum guide will need to become the primary priority for all sections of this course. **This is subject to change as new information becomes available.** Current as of 8/27/2020.

The below topics and learning targets are deemed of critical importance and should be the primary focus of teachers enhancements to the district provided virtual course, paced to be the majority of learner time and engagement, fully supported with descriptive learning centered feedback on formative and summative assessments, encouraging multiple opportunities to revise and demonstrate proficiency.

All other learning targets are to still remain incorporated as provided in the district ready virtual course, but necessarily emphasized in the facilitation. **Prioritization should not be interpreted to mean elimination of secondary/non-prioritized topics or learning targets.** There may be circumstances in exception to this. Any topics and/or targets to be eliminated will clearly identified below as instructing to them in the COVID-19 context is an unacceptable risk and the topic/target is not required by the Iowa Core.\*

Emphasizing a priority target could include, but not limited to:

- **Adding** lessons, activities, engagements to the provided district ready virtual course modules
- Providing extended target/success criteria centered individualized or whole group feedback following assessments
- Communicating encouragement to revise or offer multiple opportunities to accomplish deeper learning toward the priority targets
- Composing and posting instructional themed and appropriately timed course announcements proactively or responsively toward improving growth to a priority target
- Planning agendas for live/synchronous meetings with mini lessons or discussion toward priority targets.
- Providing pace planning documents/ pages, checklist to be sure learners seek to accomplish a deep level of learning in the priority targets
- Evaluating the Body of Evidence for grading/topic scores which recognizes the priority targets having been an emphasis during facilitation.

### Topic 1: Properties of Matter

Priority-None.

This topic is considered non-priority. Efficient facilitation of the district provided opportunities only is expected.

### Topic 2: Energy: Particles in Motion

Priority- 3A. Use models to depict the relationship between the pressure, temperature and volume in terms of molecular collisions and account for energy in the system. (energy is conserved). *Resource: ICC [HS-PS2-3](#)*  
*Evidence statement to guide learner feedback and course customization.*

### Topic 3: Energy: Phase Change

Priority- 3B. Create a computational model to calculate the change in the energy of one component in a system.

3C. Predict the changes in a system when two substances of different temperatures are combined within a closed system and support with reasoning.

*Resource: ICC [HS-PS3-1](#) (3B) and [HS-PS3-4](#)(3C) Evidence statements to guide learner feedback and course customization.*

#### Topic 4: The Mole

Priority- 3A. Use a computational model and the molar mass to determine the amount of a substance from a given quantity.

*Resource: ICC [HS-PS1-7](#) Evidence statements to guide learner feedback and course customization.*

#### Topic 5: Bonding

Priority-3B. Evaluate data to predict the type of compound based on the properties of a substance and explain how attractive forces contribute to those properties.

3C. Develop models to communicate differences between ionic and covalent bonds based on valence electrons.

*Resource: ICC [HS-PS1-3](#) (3B) and [HS-PS1-2](#) (3C) an Evidence statements to guide learner feedback and course customization.*

#### Topic 6: Lab Skills- Omit.

Explanation provided in the introduction above paragraph 3.