

## Aledo Grade 8 Storyline Performance Expectations

### 2017 TEKS

8.5 The student knows that matter is composed of atoms and has chemical and physical properties

8.5(A) describe the structure of atoms, including the masses, electrical charges, and locations, of protons and neutrons in the nucleus and electrons in the electron cloud

8.5(B) identify that protons determine an element's identity and valence electrons determine its chemical properties, including reactivity

8.5(C) interpret the arrangement of the Periodic Table, including groups and periods, to explain how properties are used to classify elements

8.5(D) recognize that chemical formulas are used to identify substances and determine the number of atoms of each element in chemical formulas containing subscripts

8.5(E) investigate how evidence of chemical reactions indicates that new substances with different properties are formed and how that relates to the law of conservation of mass

### 2021 TEKS

OLD	2021 TEKS Performance Expectations	Michelle's NGSS CrossWalk of TEKS to NGSS	The Wonder of Science Assessment	The Wonder of Science Instructional Resources
8.5	(6) Matter and energy. The student understands that matter can be classified according to its properties and matter is conserved in chemical changes that occur within closed systems. The student is expected to: (Explanation)(Matter)			
8.5 (A)	REMOVED			
8.5 (B)	REMOVED			
8.5 (C)	REMOVED			
8.5 (D)	MOVED TO GRADE 7			
8.5 (E)	(6E) investigate how mass is conserved in chemical reactions and relate conservation of mass to the rearrangement of atoms using chemical equations, including photosynthesis (Investigate)(Quantity)	* <b>MS-PS1-5</b> Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. (Energy and Matter)	<a href="#">The Underwater Battery</a>	<a href="#">Resources</a>
**New	(6A) explain by modeling how matter is classified as elements, compounds, homogeneous mixtures, or heterogeneous mixtures; (Model)(Scale)	<b>MS-PS1-1</b> Develop models to describe the atomic composition of simple molecules and extended structures. (Scale, Proportion, and Quantity)	<a href="#">Where Does the Mass Come From?</a> <a href="#">KEY - Where Does the Mass Come From?</a>	<a href="#">Resources</a>
**New	(6B) use the periodic table to identify the atoms involved in chemical reactions; (Analyze)(Patterns)			

<b>**New</b>	(6C) describe the properties of cohesion, adhesion, and surface tension in water and relate to observable phenomena, such as the formation of droplets, transport in plants, and insects walking on water; (Explain)(Patterns)			
<b>**New</b>	(6D) compare and contrast the properties of acids and bases, including pH relative to water; and (Analyze)(Patterns)			

\* Content similar, The Wonder of Science crosswalk

\*\* Not included in Storyline Planner for May 31, 2023