# The Science Duo – TEKS Alignment Guide (Grade 6)

| **Complete Unit Bundles by TEKS**<br>Includes Lesson Plans, PowerPoint and Notes, Interactive Notebook Pages, Phenomenon and Guided Practice Activities, Literacy Articles, Independent Practice Activities, S.C.I.E.N.C.E. Stations, Task Cards, Small Group Activities, Assessments, Warm-Ups, Homework Sheets, and Exit Tickets. | |
|---|---|
| **6th, 7th, and 8th Grade Pacing Guides** | **Pacing Guides** |
| 6.1C - use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards. | **Science Lab Safety Unit Bundle** |
| 6.6A – compare solids, liquids, and gases in terms of their structure, shape, volume, and kinetic energy of atoms and molecules | **States of Matter Unit Bundle** |
| 6.6B – investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures | **Physical Properties of Matter Unit Bundle** |
| 6.6C – identify elements on the periodic table as metals, nonmetals, metalloids, and rare Earth elements based on their physical properties and importance to modern life | **Metals, Nonmetals, and Metalloids Unit Bundle** |
| 6.6D – compare the density of substances relative to various fluids | **Density Unit Bundle** |
| 6.6E - identify the formation of new substance by using the evidence of a possible chemical change, including production of a gas, change in thermal energy, production of a precipitate, and color change | **Evidence of Chemical Changes Unit Bundle** |
| 6.7A - identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real-world applications | **Types of Forces Unit Bundle** |
| 6.7B - calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced | **Net Force Unit Bundle** |
| 6.7C - identify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of Motion | **Newton's 3rd Law of Motion Unit Bundle** |
| 6.8A - compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy | **Potential and Kinetic Energy Unit Bundle** |
| 6.8B - describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis | **Energy Transformations Unit Bundle** |
| 6.8C - explain how energy is transferred through transverse and longitudinal waves | **Transverse and Longitudinal Waves Unit Bundle** |
| 6.9A - model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons | **Seasons Unit Bundle** |
| 6.9B - describe and predict how the positions of the Earth, Sun, and Moon cause daily, spring, and neap cycles of ocean tides due to gravitational force | **Tides Unit Bundle** |
| 6.10A - differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system | **Earth's Spheres Unit Bundle** |


© The Science Duo, LLC

# The Science Duo – TEKS Alignment Guide (Grade 6)

| **Complete Unit Bundles by TEKS**<br>Includes Lesson Plans, PowerPoint and Notes, Interactive Notebook Pages, Phenomenon and Guided Practice Activities, Literacy Articles, Independent Practice Activities, S.C.I.E.N.C.E. Stations, Task Cards, Small Group Activities, Assessments, Warm-Ups, Homework Sheets, and Exit Tickets. | |
|---|---|
| 6.10B - model and describe the layers of Earth, including the inner core, outer core, mantle, and crust | **Layers of the Earth Unit Bundle** |
| 6.10C - describe how metamorphic, igneous, and sedimentary rocks form and change through geological processes in the rock cycle | **Rock Cycle Unit Bundle** |
| 6.11A - research and describe why resource management is important in reducing global energy, poverty, malnutrition, and air and water pollution<br><br>6.11B - explain how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources | **Resource Management and Conservation Unit Bundle** |
| 6.12A - investigate how organisms and populations in an ecosystem depend on and may compete for biotic factors such as food and abiotic factors such as availability of light and water, range of temperatures, or soil composition | **Biotic and Abiotic Factors Unit Bundle** |
| 6.12B - describe and give examples of predatory, competitive, and symbiotic relationships between organisms, including mutualism, parasitism, and commensalism | **Organism Relationships Unit Bundle** |
| 6.12C - describe the hierarchical organization of organism, population, and community within an ecosystem | **Ecological Organization Unit Bundle** |
| 6.13A - describe the historical development of cell theory and explain how organisms are composed of one or more cells, which come from pre-existing cells and are the basic unit of structure and function | **Cell Theory Unit Bundle** |
| 6.13B - identify and compare the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular and multicellular, and autotrophic and heterotrophic | **Characteristics of Organisms Unit Bundle** |
| 6.13C - describe how variations within a population can be an advantage or disadvantage to the survival of a population as environments change | **Variation Unit Bundle** |



© The Science Duo, LLC

# ADDITIONAL RESOURCES

All resources on the following pages are supplemental resources that can be accessed using the links provided.



© The Science Duo, LLC

# The Science Duo – TEKS Alignment Guide (Grade 6)

| | |
|---|---|
| 6.6A – compare solids, liquids, and gases in terms of their structure, shape, volume, and kinetic energy of atoms and molecules | Word Wall |
| 6.6B – investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures | Word Wall |
| 6.6C – identify elements on the periodic table as metals, nonmetals, metalloids, and rare Earth elements based on their physical properties and importance to modern life | Word Wall |
| 6.6D – compare the density of substances relative to various fluids | Word Wall |
| 6.6E - identify the formation of new substance by using the evidence of a possible chemical change, including production of a gas, change in thermal energy, production of a precipitate, and color change | Word Wall |
| 6.7A - identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real-world applications | |
| 6.7B - calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced | |
| 6.7C - identify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of Motion | |
| 6.8A - compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy | |
| 6.8B - describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis | |
| 6.8C - explain how energy is transferred through transverse and longitudinal waves | |
| 6.9A - model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons | |
| 6.9B - describe and predict how the positions of the Earth, Sun, and Moon cause daily, spring, and neap cycles of ocean tides due to gravitational force | |
| 6.10A - differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system | |



© The Science Duo, LLC

# The Science Duo – TEKS Alignment Guide (Grade 6)

| | |
|---|---|
| 6.10B - model and describe the layers of Earth, including the inner core, outer core, mantle, and crust | |
| 6.10C - describe how metamorphic, igneous, and sedimentary rocks form and change through geological processes in the rock cycle | |
| 6.11A - research and describe why resource management is important in reducing global energy, poverty, malnutrition, and air and water pollution<br><br>6.11B - explain how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources | |
| 6.12A - investigate how organisms and populations in an ecosystem depend on and may compete for biotic factors such as food and abiotic factors such as availability of light and water, range of temperatures, or soil composition | |
| 6.12B - describe and give examples of predatory, competitive, and symbiotic relationships between organisms, including mutualism, parasitism, and commensalism | |
| 6.12C - describe the hierarchical organization of organism, population, and community within an ecosystem | |
| 6.13A - describe the historical development of cell theory and explain how organisms are composed of one or more cells, which come from pre-existing cells and are the basic unit of structure and function | |
| 6.13B - identify and compare the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular and multicellular, and autotrophic and heterotrophic | |
| 6.13C - describe how variations within a population can be an advantage or disadvantage to the survival of a population as environments change | |



© The Science Duo, LLC