## ADW Grades 6-8 Earth and Space Science Standards

| 2017                             |   |
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| EARTH'S PLACE IN THE<br>UNIVERSE | Standard  |
| SC.6-8.ESS.1-1                   | Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and the moon, and seasons.  |
| SC.6-8.ESS.1-2                   | Construct explanations for how gravity affects the motion of objects in the solar system and tides on Earth.  |
| SC.6-8.ESS.1-3                   | Obtain and communicate information to describe how data from technologies provide information about objects in the solar system and the universe.   |
| SC.6-8-ESS.1-4                   | Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6 billion-year-old history.                                       |
| EARTH'S SYSTEMS                  | Standard  |
| SC.6-8-ESS.2-1                   | Obtain and communicate information about the relative position, density, and composition of Earth's layers and the cycling of matter and energy within and between them.                              |
| SC.6-8.ESS.2-2                   | Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of past plate motions.   |
| SC.6-8.ESS.2-3                   | Develop a model to describe the cycling of water through Earth's systems driven by<br>energy from the sun and the force of gravity.   |
| SC.6-8.ESS.2-4                   | Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.   |
| SC.6-8.ESS.2-5                   | Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.                             |
| SC.6-8.ESS.2-6                   | Construct an explanation based on evidence for how natural processes can change<br>Earth's surface at varying time and spatial scales.  |
| EARTH AND HUMAN<br>ACTIVITY      | Standard  |
| SC.6-8.ESS.3-1                   | Construct a scientific explanation based on evidence for how the uneven distributions of Earth's minerals, energy, and groundwater resources are the result of past and current geological processes. |
| SC.6-8-ESS.3-2                   | Construct an argument supported by evidence for how increases in consumption of natural resources impact Earth's systems.   |
| SC.6-8.ESS.3-3                   | Apply scientific principles to design a method for monitoring and minimizing human impact on the environment.   |
| SC.6-8-ESS.3-4                   | Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.  |