OSSD Scope & Sequence: Science Grade 6

Scope & Sequence (S&S) is an overview of the skills and content covered in your curriculum at each class/instructional level. It provides an overview of the length of time (scope) and the order (sequence) in which key content will be taught. This template is intended to help develop a S&S for one class/instructional level.

Grade Level(s): 6
Content Area and/or Course Title: Science

Unit Title	Time/Term	Focus Standards from NGSS
Newton's Laws	**Trimester 1 Unit 1**	**MS-PS2-2.** Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object. **MS-PS2-1.** Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.
Electrical and Magnetic Forces	**Trimester 1 Unit 2**	**MS-PS2-3.** Ask questions about data to determine the factors that affect the strength of electric and magnetic forces. **MS-PS2-5.** Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.
Matter	**Trimester 2 Unit 3**	**MS-PS1-1.** Develop models to describe the atomic composition of simple molecules and extended structures. **MS-PS1-3.** Gather and make sense of information to describe that synthetic materials come from natural resources and impact society. **MS-PS1-4.** Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

Chemical Reactions	**Trimester 2 Unit 4**	MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. MS-PS1-5. 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. **MS-PS1-6.** Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.
Space Systems	**Trimester 3 Unit 5**	**5-PS2-1.** Support an argument that the gravitational force exerted by Earth on objects is directed down. **MS-PS2-4.** Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects. **5-ESS1-1.** Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth. **5-ESS1-2.** Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. **MS-ESS1-1.** Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons. **MS-ESS1-2.** Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system. **MS-ESS1-3.** Analyze and interpret data to determine scale properties of objects in the solar system.