Curriculum Map
6th Grade Science

Time: when topic will be taught and how long will be spent on topic	**Standard:** Indiana Academic Standard being Taught	**Topic:** Content being taught and Materials used
August		**Methods of Science** ● iLearn BOY Science Resource ● Methods of Science (NOS in book)
September Chapter One (1 weeks) Chapter Two (3 weeks)		**Chapter One** - Speed, Acceleration, and Velocity ● Describing Motion (Lesson One) ● Speed and Velocity (Lesson Two) ● Distance/Time Graphs **Chapter Two** - Energy and Energy Transformations ● Forms of Energy (Lesson One) ● Energy Transformations (Lesson Two)
October	**MS-PS4-1**. Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave **MS-PS4-2.** Develop and use a model to describe that waves are	**Chapter Three** - Waves ● Introduction to Waves (Bill Nye Video) ● What Are Waves? (Lesson One) ● Wave Properties (Lesson Two) ● Wave Interactions (Lesson Three)

	reflected, absorbed, or transmitted through various materials.	
November	**MS-PS4-1**. Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave **MS-PS4-2.** Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials. **MS-PS4-3**. Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals. [Clarification Statement: Emphasis is on a basic understanding that waves can be used for communication purposes. Examples could include using fiber optic cable to transmit light pulses, radio wave pulses in Wi-Fi devices,	**Chapter Four** - Sound and Light ● Sound (Lesson One) ● Light (Lesson Two) ● Mirrors, Lenses, and the Eye (Lesson Three)

	and conversion of stored binary patterns to make sound or text on a computer screen.]	
December	**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.	**Chapter Five - Exploring Space** ● Observing the Universe (Lesson One) ○ Electromagnetic Spectrum ○ Types of satellites **Chapter Six** - The Earth-Sun-Moon System ● Earth's Motion (Lesson One) ● Earth's Moon (Lesson Two) ● Eclipses and Tides (Lesson Three) ○ Lunar Phases
January	**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.	**Chapter Seven -** The Solar System ● The Structure of the Solar System (Lesson One) ● The Inner Planets (Lesson Two) ● The Outer Planets (Lesson Three) ● Dwarf Planets and Other Objects (Lesson Four)
February	**MS-LS1-6.** Construct a scientific explanation based on evidence for the role of	**Chapter Eight -** Matter and Energy in the Environment ● Abiotic Factors (Lesson One) ● Cycles of Matter (Lesson Two)

	photosynthesis in the cycling of matter and flow of energy into and out of organisms. **MS-LS2-1.** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. **MS-LS2-3**. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	• Energy in Ecosystems (Lesson Three)
March	**MS-LS2-1.** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. **MS-LS2-2**. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems **MS-LS2-4.** Construct an argument supported by empirical evidence that changes to physical	**Chapter Nine -** Populations and Communities • Populations (Lesson One) • Changing Populations (Lesson Two) • Communities (Lesson Three)

	or biological components of an ecosystem affect populations. **MS-LS2-5.** Evaluate competing design solutions for maintaining biodiversity and ecosystem services.	
April		**Chapter Ten** - Biomes and Communities ● Land Biomes (Lesson One) ● Aquatic Ecosystems (Lesson Two) ● How Ecosystems Change (Lesson Three)
May		Testing Review