

Grade Level	Earth & Space Sciences	Life Sciences	Physical Sciences	Science & Technology	Scientific Inquiry	Scientific Ways of Knowing
Grade 5 Ohio's New Learning Standards SCIENCE	Earth and Space Science (ESS): Solar system, each planet has unique characteristics; the sun is one of many stars; cycles and patterns of motion	Life Science (LS): Organisms perform a variety of roles in an ecosystem. All of the processes that take place within organisms require energy.	Physical Science (PS): Light, Sound, and Motion; The amount of change in movement of an object is based on the mass of the object and the amount of force exerted. Light and sound are forms of energy that behave in predictable ways.	Scientific Inquiry and Investigation: Identify questions that can be answered through scientific investigations; Use appropriate mathematics, tools and techniques to gather data and information; Analyze and interpret data; Develop descriptions, models, explanations and predictions; Think critically and logically to connect evidence and explanations; Recognize and analyze alternative explanations and predications; and Communicate scientific procedures and explanations.		
Grade 6 Ohio's New Learning Standards SCIENCE	Earth and Space Science (ESS): Minerals have specific, quantifiable properties. Igneous, metamorphic and sedimentary rocks have unique characteristics that can be used for identification and/or classification. Soil is unconsolidated material that contains nutrient matter and weathered rock.		Physical Science (PS): Matter and Motion; There are two categories of energy: kinetic and potential. An object's motion can be described by its speed and the direction in which it is moving.	Scientific Inquiry and Investigation: Identify questions that can be answered through scientific investigations; Use appropriate mathematics, tools and techniques to gather data and information; Analyze and interpret data; Develop descriptions, models, explanations and predictions; Think critically and logically to connect evidence and explanations; Recognize and analyze alternative explanations and predications; and Communicate scientific procedures and explanations.		
Grade 7 Ohio's New Learning Standards SCIENCE		Life Science (LS): In any particular biome, the number, growth and survival of organisms and populations depend on biotic and abiotic factors.	Physical Science (PS): Energy can be transformed or transferred but is never lost.	Scientific Inquiry and Investigation: Identify questions that can be answered through scientific investigations; Use appropriate mathematics, tools and techniques to gather data and information; Analyze and interpret data; Develop descriptions, models, explanations and predictions; Think critically and logically to connect evidence and explanations; Recognize and analyze alternative explanations and predications; and Communicate scientific procedures and explanations.		
Grade 8 Ohio's New Learning Standards SCIENCE			Physical Science (PS): Forces and Motion; Forces between objects act when the objects are in direct contact or when they are not touching. Forces have magnitude and direction. There are different types of potential energy.	Scientific Inquiry and Investigation: Identify questions that can be answered through scientific investigations; Use appropriate mathematics, tools and techniques to gather data and information; Analyze and interpret data; Develop descriptions, models, explanations and predictions; Think critically and logically to connect evidence and explanations; Recognize and analyze alternative explanations and predications; and Communicate scientific procedures and explanations.		