

Grade 3 Science Pacing Guide in Detail by SOLs

VDOE Grade 3 Science Framework

<p>*Ongoing throughout the year</p> <p>3.1 The student will demonstrate an understanding of scientific and engineering practices by asking questions and defining problems; planning and carrying out investigations; interpreting, analyzing, and evaluating data; constructing and critiquing conclusions and explanations; developing and using models; obtaining, evaluation, and communicating information.</p>	
First Nine-Weeks	Second Nine-Weeks
<p>Living Systems & Processes</p> <p>3.4 The student will investigate and understand that adaptations allow organisms to satisfy life needs and respond to the environment. Key ideas include</p> <ul style="list-style-type: none"> a) populations may adapt over time; b) adaptations may be behavioral or physical; and c) fossils provide evidence about the types of organisms that lived long ago as well as the nature of their environments. <p>3.5 The student will investigate and understand that aquatic and terrestrial ecosystems support a diversity of organisms. Key ideas include</p> <ul style="list-style-type: none"> a) ecosystems are made of living and nonliving components of the environment; and b) relationships exist among organisms in an ecosystem. 	<p>Force, Motion, and Energy</p> <p>3.2 The student will investigate and understand that the direction and size of force affects the motion of an object. Key ideas include</p> <ul style="list-style-type: none"> a) multiple forces may act on an object; b) the net force on an object determines how an object moves; c) simple machines increase or change the direction of a force; and d) simple and compound machines have many applications. <p>3.3 The student will investigate and understand how materials interact with water. Key ideas include</p> <ul style="list-style-type: none"> a) solids and liquids mix with water in different ways; and b) many solids dissolve more easily in hot water than in cold water.
Third Nine-Weeks	Fourth Nine-Weeks
<p>Earth and Space Systems</p> <p>3.6 The student will investigate and understand that soil is important in ecosystems. Key ideas include</p> <ul style="list-style-type: none"> a) soil, with its different components, is important to organisms; and b) soil provides support and nutrients necessary for plant growth. <p>3.7 The student will investigate and understand that there is a water cycle and water is important to life on Earth. Key ideas include</p> <ul style="list-style-type: none"> a) there are many reservoirs of water on Earth; b) the energy from the sun drives the water cycle; c) the water cycle involves specific processes. 	<p>Earth Resources</p> <p>3.8 The student will investigate and understand that natural events and humans influence ecosystems. Key ideas include</p> <ul style="list-style-type: none"> a) human activity affects the quality air, water, and habitats; b) water is limited and needs to be conserved; c) fire, flood, disease, and erosion affect ecosystems; and d) soil is a natural resource and should be conserved.