

ELF and the New Hampshire Curriculum Framework

This summary identifies the **Curriculum Standards** in Science, Mathematics, Social Sciences, and English/Language Arts that students may address through each year-long ELF theme (*Adaptations, Habitats, Cycles, Designs of Nature, and Earth & Sky*) by participation in classroom activities, outdoor exploration, and various extensions described in each ELF unit. ELF also exposes students to a variety of different learning opportunities and best practices. In ELF, students, community volunteers and teachers explore and learn together through observations, investigations and multi-disciplinary approaches. ELF volunteers display scientists' habits of mind. Students have the opportunity for frequent interactions with the natural world. Students learn in small and large groups both in the classroom and outdoors. ELF encourages students to make connections between their lives and the world beyond the school yard.

<p>Science</p> <p><u>Science as Inquiry</u>: 1a (how scientific enterprise operates).</p> <p><u>Science, Technology and Society</u>: 2 a-c (use measuring instruments; use technology to observe nature; use technology to analyze, synthesize and communicate information).</p> <p><u>Life Science</u>: 3a-d (recognize patterns and products of evolution; how environmental factors affect all living systems; link between organisms and physical setting via energy; fundamental structures and functions of organisms).</p> <p><u>Earth/Space Science</u>: 4a-c (Earth position in solar system; Earth's systems; Earth's resources).</p> <p><u>Physical Science</u>: 5a-g (matter, motion, forces, & energy).</p> <p><u>Unifying Themes</u>: 6a-d (systems, change, models, recording and interpreting data).</p>	<p>Mathematics</p> <p><u>Problem solving strategies</u>: 1a (formulate and solve real world problems; use a variety of strategies).</p> <p><u>Mathematical reasoning</u>: 1b (draw conclusions, use models, explain processes).</p> <p><u>Mental computation and Estimation skills</u>: 3d (use variety of strategies for solving problems; estimate appropriate units of measurement).</p> <p><u>Geometric shapes</u>: 4a (name, describe and classify).</p> <p><u>Spatial sense</u>: 4b (use position terms, draw shapes in various positions, construct 3-d objects).</p> <p><u>Systems of measurement</u>: 4c (develop measuring skills, understand units of measure, understand time and temperature).</p> <p><u>Data analysis and statistics</u>: 5a (collect, organize and interpret data; predict outcomes).</p> <p><u>Understanding mathematical change</u>: 7a (record data where change is occurring; notice patterns).</p> <p><u>Using discrete math for real-world situations</u>: 8a (tallying, making lists, organizing data)</p>
<p>English/Language Arts</p> <p><u>Reading</u>: 1 (reading with understanding and appreciation).</p> <p><u>Writing</u>: 2- (write effectively for variety of purposes).</p> <p><u>Speaking, listening, viewing</u>: 3 (speak and listen purposefully).</p> <p><u>English language uses</u>: 5 - 7 (use language to gather and organize information; communicate effectively)</p>	<p>Social Sciences</p> <p><u>Geography</u>: 10-12; 14-15 (use maps for geographic information; physical and human features that define place; landform patterns and water systems; resource use; using geographic information to interpret history and for planning purposes).</p> <p><u>History</u>: 16 (employ historical analysis to make reasoned judgments and gain perspective)</p>