

**Technology Education / Technology Foundations Pacing Guide**

Time Frame	SOL Objective/ Competency	Essential Understandings/Questions	Essential Knowledge/Skills (Daily Snap Shot Quizzes to Check Progress)
<b>1<sup>st</sup> Quarter (First 4½ Weeks)</b>	001-074	<b>Technology Introduction</b> 1. Chapter 01-Why Study Technology 2. Chapter 02-Concepts of Technology 3. Chapter 03-Tools, Materials, and Processes of Technology 4. Chapter 04-Design and Problem Solving 5. Chapter 05-From Drawings to Prototypes 6. Chapter 06-Technology Connections	<b>Technology Labs</b> <ul style="list-style-type: none"> <li>• Types of Technology</li> <li>• Seven Technology Resources</li> <li>• Six Simple Machines</li> <li>• Mouse Trap Car</li> <li>• Catapult</li> <li>• General Shop Safety</li> <li>• Hand Tool Safety</li> <li>• Eye Protection Safety</li> <li>• Saber Saw Safety</li> <li>• Portable Power Drill Safety</li> <li>• Design and Problem Solving</li> <li>• Basic Technical Drawing</li> </ul>

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<b>2<sup>nd</sup> Quarter (Second 4½ Weeks)</b>	001-074	<b>Energy and Power Technology</b> 1. Chapter 07-Energy and Power for Technology 2. Chapter 08-Electricity to Electronics <b>Communication Technology</b> 1. Chapter 09-Wave Communication 2. Chapter 10-Computer Technologies 3. Chapter 11-Graphic Communication 4. Chapter 12-Photographic Technologies 5. Chapter 13-Multimedia Technologies	<b>Technology Labs</b> <ul style="list-style-type: none"> <li>• Forms of Power</li> <li>• Hydraulic Power</li> <li>• Hydraulic Arm</li> <li>• Basic Electronics Study</li> <li>• Basic AC/DC Circuit Design</li> <li>• Build an Electric Motor</li> <li>• Build a Light Box</li> <li>• Wave Communication Labs</li> <li>• Build a Computer Lab</li> <li>• Network Computers</li> <li>• Student Newsletter</li> <li>• Calendars</li> <li>• Photography Labs</li> <li>• Videography Labs</li> <li>• Build a Webpage</li> </ul>

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<b>3<sup>rd</sup> Quarter (Third 4½ Weeks)</b>	001-074	<b>Biotechnologies</b> 1. Chapter 14-Medical Biotechnologies 2. Chapter 15-Agricultural Technologies <b>Manufacturing Technology</b> 1. Chapter 16-Manufacturing Systems 2. Chapter 17-Manufacturing in the 21 <sup>st</sup> Century	DNA Projects Hydroponics Garden Sustainable Garden Aquaculture Triangle Game Project Boot Jack Project CNC Hot Foam Cutter

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<b>4<sup>th</sup> Quarter (Last 4½ Weeks)</b>	001-074	<b>Construction Technology</b> 1. Chapter 18-The World of Construction 2. Chapter 19-Building a House 3. Chapter 20-Heavy Construction <b>Transportation Technology</b> 1. Chapter 21-Transportation Power 2. Chapter 22-Transportation Systems	Bridge Model Home Model Corn Hole Board Trebuchet Shelf Projects Hovercraft Rubber Band Car Mousetrap Car Maglev Cars Robotics