

## 2nd Grade Technology Pacing Guide

Weeks	Unit Title	Focus & Learning Goals
1–6	<b>Unit 1: Computing Devices &amp; Systems</b>	<ul style="list-style-type: none"><li>• select and operate computing devices per user needs</li><li>• explain hardware and software functions</li><li>• describe hardware/software problems using accurate language</li><li>• describe and model network connections and Internet use</li></ul>
7–12	<b>Unit 2: Internet &amp; Security Basics</b>	<ul style="list-style-type: none"><li>• model how people connect via networks/Internet</li><li>• create strong passwords; explain security importance</li><li>• secure device access</li></ul>
13–18	<b>Unit 3: Data Collection and Visualization</b>	<ul style="list-style-type: none"><li>• collect/display data visually, including climate data</li><li>• store, manipulate, modify, delete data</li><li>• identify data patterns and make predictions using visuals</li></ul>
19–24	<b>Unit 4: Algorithms &amp; Programming</b>	<ul style="list-style-type: none"><li>• model daily processes via algorithms</li><li>• use symbols to represent data</li><li>• create programs with sequences and simple loops</li><li>• break tasks into steps and describe program expectations</li><li>• give attribution</li><li>• debug simple loops/programs</li></ul>
25–30	<b>Unit 5: Design Thinking – Explore &amp; Build</b>	<ul style="list-style-type: none"><li>• communicate product/device function</li><li>• collaborate to design/simple build using appropriate tools</li><li>• identify constraints in engineering design</li><li>• explore how products meet human needs</li><li>• model product disassembly/reassembly; brainstorm improvements, repairs</li></ul>
31–36	<b>Unit 6: Design Thinking – Resources &amp; Global Context</b>	<ul style="list-style-type: none"><li>• classify products as natural vs. technological</li><li>• identify resources needed and recycling systems</li><li>• explain disposal vs. reuse environmental impact</li><li>• compare technology use across communities</li></ul>