

3rd Grade Technology Pacing Guide

Weeks	Unit Title	Focus & Learning Goals
1–6	Unit 1: Computing Systems & Troubleshooting	<ul style="list-style-type: none">• model device connections (hardware + software systems)• recommend UX improvements• justify design trade-offs• apply systematic troubleshooting strategies
7–12	Unit 2: Data Transmission & Security	<ul style="list-style-type: none">• model packet-based info transmission and protocols• understand wired/wireless data flow• explore physical & digital security• analyze malware-triggered security responses
13–18	Unit 3: Data Management & Modeling	<ul style="list-style-type: none">• collect, clean, and transform data• compare storage requirements for various data types• distinguish bit-level storage vs. display• test and refine computational models (e.g. climate)
19–24	Unit 4: Algorithms & Structured Programming	<ul style="list-style-type: none">• design with flowcharts/pseudocode• create programs using variables, sequences, nested loops, compound conditionals• decompose problems and build reusable procedures
25–30	Unit 5: Iterative Development & Collaboration	<ul style="list-style-type: none">• modify/remix code with attribution• build programs with existing libraries/media• apply systematic testing (multiple test cases/users)• document and debug collaboratively
31–36	Unit 6: Design Thinking, Impact & Ethics	<ul style="list-style-type: none">• evaluate products for function, value, aesthetics (user/producer view)• prototype solutions for real-world problems under constraints• address bias/accessibility issues• analyze societal, cultural, environmental, economic effects and ethical implications of technology