

Course Title: Middle School Tech Apps, Grade 7

State: TX
State Course Title: Technology Applications, Grade 6,
State Course Code: 126.14
State Standards: Texas Essential Knowledge and Skills for Technology Applications
Date of Standards: 2022 (Update)

TEKS	Unit Name(s)	Lesson(s) Numbers
2. Computational Thinking: Foundations		
(A) decompose real-world problems into structured parts by using flowcharts	Unit 3: Go With the Flow	Lesson 3
(B) analyze the patterns and sequences found in flowcharts	Unit 3: Go With the Flow	Lesson 4
(C) identify abstraction and analyze how an algorithm the student created can be generalized to solve additional problems	Unit 3: Go With the Flow	Lesson 3
(D) design a plan collaboratively using flowcharts that document a problem, possible solutions, and an expected timeline for the development of a coded solution	Unit 3: Go With the Flow	Lessons 1, 3, 4
(E) analyze different techniques used in debugging and apply them to an algorithm	Unit 4: Think Like a Computer	Lesson 4
(F) analyze the benefits of using iteration (code and sequence repetition) in algorithms	Unit 4: Think Like a Computer	Lesson 2
Computational Thinking: Applications		
(A) manipulate and rename variables and describe different data types	Unit 4: Think Like a Computer	Lessons 2, 5
(B) create text-based programs using a software design process with nested loops that address different subproblems within a real-world context	Unit 4: Think Like a Computer	Lesson 3
3. Creativity and Innovation: Emerging Technologies		
(A) explain how changes in technology throughout history have impacted various areas of study	Unit 2: Developing Your Toolkit	Lesson 4
(B) explain how global trends impact the development of technology	Unit 2: Developing Your Toolkit	Lesson 5

(C) transfer current knowledge to the learning of newly encountered technologies	Unit 2: Developing Your Toolkit	Lesson 3
Creativity and Innovation: Innovative Design Process		
(A) utilize goal setting and personal character growth independently such as demonstrating responsibility and appropriate self-advocation to resolve challenges in design process	Unit 3: Go With the Flow	Lesson 2
(B) discuss and implement a design process to plan and select digital tools to develop and refine a prototype or model through trial and error	Unit 3: Go With the Flow	Lesson 1
(C) identify how the design process is used in various industries	Unit 3: Go With the Flow	Lesson 1
4. Data Literacy, Management and Representation: Organize, Manage and Analyze Data		
(A) use digital tools to transform data to analyze trends and make inferences and predictions	Unit 3: Go With the Flow	Lesson 5
Data Literacy, Management and Representation: Collect Data		
(A) demonstrate how data can be represented in a binary number system	Unit 4: Think Like a Computer	Lesson 2
(B) evaluate advanced search strategies, including keyword(s), Boolean operators, and limiters	Unit 1: Where Do Your Footprints Lead?	Lesson 4
Data Literacy: Communication and Publish Results		
(A) use digital tools to communicate and display the data of a product or process to inform or persuade an intended audience	Unit 6: Connect with Your Audience	Lessons 1, 3
5. Digital Citizenship: Ethics and Laws		
(A) demonstrate adherence to local Acceptable Use Policy (AUP) and practice and model safe, ethical, and positive online behaviors	Unit 1: Where Do Your Footprints Lead?	Lesson 2
(B) explain the importance of intellectual property laws, including the benefits of protection for content owners and the consequences of violating these laws	Unit 5: Collaborating with Confidence	Lesson 3
(C) create citations and cite sources for a variety of digital forms of intellectual property	Unit 5: Collaborating with Confidence	Lesson 3
(D) evaluate how various types of media, including social media, and technology can be used to exaggerate and misrepresent information	Unit 1: Where Do Your Footprints Lead?	Lesson 3
Digital Citizenship: Social Interactions		

(A) classify actions as having a positive or negative effect on a digital footprint	Unit 1: Where Do Your Footprints Lead?	Lesson 1
(B) create and revise formal and informal communications using a feedback process and appropriate digital etiquette	Unit 5: Collaborating with Confidence	Lesson 1
(C) collaborate on digital platforms such as recording a video conference using appropriate formal and informal digital etiquette	Unit 5: Collaborating with Confidence	Lesson 1
Digital Citizenship: Privacy, Safety and Security		
(A) describe and model ways to protect oneself from real-world cybersecurity attacks	Unit 1: Where Do Your Footprints Lead?	Lesson 5
(B) analyze the negative impacts of cyberbullying on the victim and the bully	Unit 1: Where Do Your Footprints Lead?	Lesson 2
6. Practical Technology Concepts: Skills and Tools		
(A) demonstrate proficiency in the use of technology terminology in projects through team collaboration and communication	Unit 3: Go With the Flow	Lesson 1
(B) demonstrate with assistance effective file management strategies SUCH AS file naming conventions, local and remote locations, backup, hierarchy, folder structure, file conversion, tags, and emerging digital organization strategies	Unit 5: Collaborating with Confidence	Lesson 4
(C) select and use the appropriate platform and tools, including selecting and using software or hardware for a defined task	Unit 6: Connect with Your Audience	Lesson 2
(D) demonstrate improvement in speed and accuracy as measured by words per minute when applying correct keyboarding techniques	Unit 2: Developing Your Toolkit	Lesson 2
(E) select and use appropriate shortcuts within applications	Unit 6: Connect with Your Audience	Lesson 4
(F) research and test potential solutions to solve hardware and software problems	Unit 5: Collaborating with Confidence	Lesson 4
(G) use a variety of types of local and remote data storage such as cloud architecture or local server to store or share data	Unit 5: Collaborating with Confidence	Lesson 4
(H) use and select productivity tools found in spread sheet, word processing, and publication applications to create digital artifacts such as reports, graphs, and charts, with increasing complexity	Unit 6: Connect with Your Audience	Lesson 4
Practical Technology Concepts: Processes		
(A) choose a variety of digital tools to create, share, and communicate digital artifacts	Unit 6: Connect with Your Audience	Lessons 2-4