The current technology applications TEKS were implemented in 2012-2013.

The revised technology applications TEKS are scheduled be implemented beginning the 2024-2025 school year.

Implementation of the new TEKS is

TEKS for each grade level, no longer in grade bands

Use of strands and substrands as organizing principles

Reorganization of content across the strands

- Computational thinking (new)

- Creativity and innovation

- Data literacy, management, and representation (new)

- Digital citizenship

- Practical technology concepts

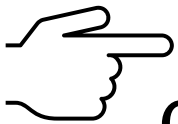New TEKS or revised TEKS for new strands and grade level structure

Integration of communications and collaboration throughout the TEKS

Strands

- ## Kindergarten

Computational thinking

- problem or task identification   - decomposition into smaller pieces

- simple pattern recognition   - predictions

- basic algorithms (step-by-step)   - create code sequences

Creativity and innovation

- personal skills needed for design processes

- application of a design process in problem-solving

Data literacy, management, and representation

- focus on what data is

- concept of searching and retrieving information

- **1st Grade**

Digital citizenship

- develops behaviors   - acceptable use

- content ownership, and safety from K   - account safety

- cyberbullying

Practical technology concepts

- builds on usage

- identification

- builds on keyboarding and ergonomics

- introduces the creation of an original product and revisions

"with assistance" and "with or without technology"

- **2nd Grade**

Computational thinking

- problem identification

- decomposition multiple solutions into sequential steps

- complex patterns

- creating and troubleshooting basic algorithms with if-then statements

- code variables and loops

Creativity and innovation

- application of a design process to create solutions to problems

- **2ⁿᵈ Grade**

Data literacy, management, and representation

- non-numerical data collection

- use of keywords/digital sources in searches independently

- use tools to create and communicate data visualizations – such as bar graphs

Digital citizenship

- develops behaviors, acceptable use, content ownership, and safety

- introduces private and public information

Practical technology concepts

- builds on usage, identification, keyboarding, and ergonomics

- introduces sharing content

"with assistance" and "with or without technology"

- **3ʳᵈ Grade**

Computational thinking

- aadds story problems
- decomposition into subproblems
- debugging
- algorithms (procedures)
- variables to store data
- sequences, loops and conditionals

Creativity and innovation

- more personal skills development and apply design process – such as feedback
- adds definition of emerging technology

Data literacy, management, and representation

- shift to numerical data collection
- use of search strategies
- use of digital tools to communicate and publish results, intent to inform, to specified audience

- 3

- **4th Grade**

Computational thinking

- decomposition into subproblems and solutions

- adds predictions from pattern   - debug algorithms

- variables to modify data   - sequences, loops & conditionals w. purpose

Creativity and innovation

- design process to improve processes/products

- **4th Grade**

Digital citizenship

- creator rights and how copyright law applies to creative work

- citations for digital media content

- types of data collection tools in digital world
- cyberbullying, responses to it – advocating for self and others

Practical technology concepts

- application selection for assigned tasks
- more application functions and terminology
- saving and naming files in context of strategies and folder structures
-

- **5th Grade**

Computational thinking

- decomposition with graphical organizers

- document problems, solutions, and coded resolution timeline

- compare and select appropriate algorithms
- design process to create block-based programs
- identify how code can be reused

Creativity and innovation

- design process with components to generate multiple solutions
- predict how emerging technologies may impact different communities

Data literacy, management, and representation

- quantitative and qualitative data; keywords, Boolean operations, and limiters

- analyze, transform and make inferences about data to answer questions
- communicate and display data w. visualization - to inform – intended audience

- **6ᵗʰ Grade**

Computational thinking

- decomposition with visual representations; analyze patterns in visual representations

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- ## 6th Grade

Data literacy, management, and representation

- data representation as Boolean expression

- use tools to transform data to discuss trends and make inferences
- communicate and display data -- to inform – intended audience

Digital citizenship

- impact of digital footprints

- create communications and presentations using appropriate etiquette

- intellectual property laws – protection and consequences
- create citations and citing digital sources

- protection from cybersecurity attacks

- various methods of cyberbullying

- **6th Grade**

Practical technology concepts

- create and design files in various formats

- application of terminology

- more advanced file management strategies

- select and use tools for a specific task

- local and remote storage

- use productivity tools to create digital artifacts

- continued keyboarding, words per minute, and troubleshooting

• 7ᵗʰ Grade

Computational thinking

- decomposition with flowcharts; analyze patterns in flowcharts

- abstraction and how algorithms can be generalized

- plan documentation with flowcharts

- application of various debugging techniques and benefits of iterations

- more work with variables and data types
- nested loops

Creativity and innovation

- continues build on design process – prototypes or models/trial and error

- connects design process to industry
- technology throughout history – impact areas of study

- global trends impact on technology

- **7th Grade**

Data literacy, management, and representation

- data representation in binary number systems

- use tools to transform data to analyze trends and make inferences and predictions

- communicate and display data -- to inform or persuade – intended audience

Digital citizenship

- actions and effects on digital footprints

- create and revise communications using feedback and using appropriate etiquette

- intellectual property and associated terminology
- information exaggeration and misrepresentation

- real world cybersecurity issues

- negative impacts of cyberbullying

- **7th Grade**

Practical technology concepts

    - create, share, and communicate digital artifacts

    - appropriate use of terminology

    - effective file management strategies

    - select and use tools for a specific task

    - local and remote storage to store or share data

    - use productivity tools to create digital artifacts

    - continued keyboarding, words per minute, and troubleshooting

    - test solutions for technical issues

- 8th Grade

- **8th Grade**

Practical technology concepts

- combine file formats for a project/audience

- share and seek feedback on files

- appropriate use of terminology in various settings

- effective file management strategies

- select and use tools for a specific task – transfer data

- select appropriate type of storage

- use productivity tools to create digital artifacts

- continued keyboarding, improved speed, and use of tools to create artifacts with increasing complexity