Contents

CODING THE STANDARDS

CODING SCHEME

SUBJECT.STANDARD.GradeLevel SUBSTANDARD.sub-substandard

Example

CAREER AND TECHNICAL EDUCATION STANDARDS FOR KINDERGARTEN	CTE	Subject
(1) The career and technical education standards for kindergarten are that each student will	K	Grade Level
(a) act as a responsible and contributing citizen and employee by exploring roles of employees, citizens, and community members	1	Standard
(b) demonstrate creativity and innovation by exploring more than one way to solve a problem	2	Standard
(c) utilize critical thinking to make sense of problems and persevere in solving them	3	Standard
(i) look for and make use of patterns and	a	SubStandard
(ii) try several methods to solve a problem	b	SubStandard
(d) plan education and career path aligned to personal goals by identifying various careers.	4	Standard
CODE	CTE.K.3.a	

K-12 STANDARDS

The following standards will go into effect on July 1, 2021.

	MONTANA CONTENT STANDARDS FOR CAREER AND TECHNICAL EDUCATION
CTE.K12	The content areas covered by the career and technical education standards may include
CTE.K12.1	act as a responsible and contributing citizen and employee
CTE.K12.2	apply appropriate academic and technical skills
CTE.K12.3	attend to personal health and financial well-being
CTE.K12.4	communicate clearly, effectively, and with reason
CTE.K12.5	consider the environmental, social and economic impacts of decisions
CTE.K12.6	demonstrate creativity and innovation
CTE.K12.7	employ valid and reliable research strategies
CTE.K12.8	utilize critical thinking to make sense of problems and persevere in solving them
CTE.K12.9	model integrity, ethical leadership, and effective management
CTE.K12.10	plan education and career path aligned to personal goals
CTE.K12.11	use technology to enhance productivity and
CTE.K12.12	work productively in teams while using cultural/global competence

CTE.PATHWAY	Students will learn career and technical education content across programs of study, also known as Career Pathways, and integrated with academic content.
	Programs of study may include
CTE.PATHWAY.1	agriculture, food, and natural resources
CTE.PATHWAY.2	architecture and construction
CTE.PATHWAY.3	arts, audio/visual technology, and communications
CTE.PATHWAY.4	business management and administration
CTE.PATHWAY.5	education and training
CTE.PATHWAY.6	finance
CTE.PATHWAY.7	government and public administration
CTE.PATHWAY.8	health science
CTE.PATHWAY.9	hospitality and tourism
CTE.PATHWAY.10	human services
CTE.PATHWAY.11	information technology
CTE.PATHWAY.12	law, public safety, corrections and security
CTE.PATHWAY.13	manufacturing
CTE.PATHWAY.14	marketing
CTE.PATHWAY.15	STEM (science, technology, engineering, math) and
CTE.PATHWAY.16	transportation, distribution and logistics

KINDERGARTEN

CTE.K	CAREER AND TECHNICAL EDUCATION STANDARDS FOR KINDERGARTEN
CTE.K.1	The career and technical education standards for kindergarten are that each student will
CTE.K.1.1	act as a responsible and contributing citizen and employee by exploring roles of employees, citizens, and community members
CTE.K.1.2	demonstrate creativity and innovation by exploring more than one way to solve a problem
CTE.K.1.3	utilize critical thinking to make sense of problems and persevere in solving them
CTE.K.1.3.a	look for and make use of patterns and
CTE.K.1.3.b	try several methods to solve a problem
CTE.K.1.4	plan education and career path aligned to personal goals by identifying various careers

FIRST GRADE

CTE.1	CAREER AND TECHNICAL EDUCATION STANDARDS FOR FIRST GRADE
CTE.1.1	The career and technical education standards for first grade are that each student will
CTE.1.1.1	act as a responsible and contributing citizen and employee by identifying the characteristics of citizenship across jobs and communities
CTE.1.1.2	communicate clearly, effectively, and with reason by recognizing effective communication and active listening skills to foster positive relationships
CTE.1.1.3	demonstrate creativity and innovation by identifying an alternate solution to a problem
CTE.1.1.4	utilize critical thinking to make sense of problems and persevere in solving them
CTE.1.1.4.a	look for and make use of patterns and
CTE.1.1.4.b	try several methods to solve a problem
CTE.1.1.5	plan education and career paths aligned to personal goals
CTE.1.1.5.a	identify and describe various careers
CTE.1.1.5.b	work successfully in small and large groups to accomplish tasks within a time frame
CTE.1.1.6	use technology to enhance productivity by exploring how technology is used in different jobs and careers
CTE.1.1.7	work productively in teams while using cultural/global competence by exploring an awareness of cultural differences to develop a sense of inclusion

SECOND GRADE

CTE.2	CAREER AND TECHNICAL EDUCATION STANDARDS FOR SECOND GRADE
CTE.2.1	The career and technical education standards for second grade are that each student will
CTE.2.1.1	act as a responsible and contributing citizen and employee by recognizing the rights and responsibilities of citizenship
CTE.2.1.2	communicate clearly, effectively, and with reason by practicing compromise and conflict resolution with support
CTE.2.1.3	consider the environmental, social and economic impacts of decisions
CTE.2.1.3.a	compare and contrast safety procedures for different environments and tasks
CTE.2.1.3.b	identify and explain the reasons for personal protective equipment for personal use
CTE.2.1.4	demonstrate creativity and innovation by discussing ways people work together to solve problems
CTE.2.1.5	utilize critical thinking to make sense of problems and persevere in solving them
CTE.2.1.5.a	outline and explain the steps to complete a task
CTE.2.1.5.b	try several methods to solve a problem
CTE.2.1.6	model integrity, ethical leadership, and effective management by describing the role of a leader
CTE.2.1.7	plan education and career paths aligned to personal goals by identifying and describing basic work skills that contribute to the success of a team
CTE.2.1.8	use technology to enhance productivity by investigating how technology in school and at work enhances learning and connections with others
CTE.2.1.9	work productively in teams while using cultural/global competence by working cooperatively to examine issues from multiple viewpoints

THIRD GRADE

CTE.3	CAREER AND TECHNICAL EDUCATION STANDARDS FOR THIRD GRADE
CTE.3.1	The career and technical education standards for third grade are that each student will
CTE.3.1.1	act as a responsible and contributing citizen and employee by identifying characteristics of being a productive employee
CTE.3.1.2	attend to personal health and financial well-being by describing how consumer actions influence the use of resources
CTE.3.1.3	communicate clearly, effectively, and with reason by applying active listening, compromise, and conflict resolution skills
CTE.3.1.4	consider the environmental, social and economic impacts of decisions
CTE.3.1.4.a	adapt to different environments by adjusting behavior to promote personal and group safety
CTE.3.1.4.b	identify and explain the reasons for personal protective equipment for personal and classroom use
CTE.3.1.5	demonstrate creativity and innovation by exploring the design cycle
CTE.3.1.6	employ valid and reliable research strategies by representing data in multiple formats
CTE.3.1.7	utilize critical thinking to make sense of problems and persevere in solving them
CTE.3.1.7.a	compare and explain similarities and differences of patterns and operations
CTE.3.1.7.b	plan and execute activities to develop a solution or complete a project and
CTE.3.1.7.c	test and refine methods to solve a problem
CTE.3.1.8	model integrity, ethical leadership, and effective management
CTE.3.1.8.a	explain how actions and attitudes impact others
CTE.3.1.8.b	define and give examples of leadership roles
CTE.3.1.9	plan education and career paths aligned to personal goals
CTE.3.1.9.a	explore career options that align with a variety of personal interests and
CTE.3.1.9.b	explore how work relates to meeting needs for goods, clothing, shelter, and other necessities for living
CTE.3.1.10	use technology to enhance productivity by explaining how technology is used in homes, schools, and jobs
CTE.3.1.11	work productively in teams while using cultural/global competence by recognizing and understanding barriers to productive communication

FOURTH GRADE

CTE.4	CAREER AND TECHNICAL EDUCATION STANDARDS FOR FOURTH GRADE
CTE.4.1	The career and technical education standards for fourth grade are that each student will
CTE.4.1.1	act as a responsible and contributing citizen and employee by exploring consequences of actions in communities and workplace
CTE.4.1.2	attend to personal health and financial well-being by investigating advertising and media that influence behavior
CTE.4.1.3	communicate clearly, effectively, and with reason by practicing compromise, consensus, and conflict resolution
CTE.4.1.4	consider the environmental, social and economic impacts of decisions
CTE.4.1.4.a	adapt to different environments by adjusting behavior to promote personal and group safety
CTE.4.1.4.b	predict potential outcomes of various decisions in a complex environment and
CTE.4.1.4.c	identify and explain the consequences of both proper and improper personal protective equipment use
CTE.4.1.5	demonstrate creativity and innovation by exploring innovations and inventions and their originators
CTE.4.1.6	employ valid and reliable research strategies by mapping data for a culture, community, or state
CTE.4.1.7	utilize critical thinking to make sense of problems and persevere in solving them
CTE.4.1.7.a	identify models that organize and analyze patterns of information
CTE.4.1.7.b	test and refine methods to solve a problem
CTE.4.1.8	model integrity, ethical leadership, and effective management by contributing constructively to teams assuming various roles and responsibilities to work effectively toward a common goal
CTE.4.1.9	plan education and career paths aligned to personal goals
CTE.4.1.9.a	describe how work relates to meeting needs for goods, clothing, shelter, and other necessities for living
CTE.4.1.9.b	prepare personal communications based upon the intended audience
CTE.4.1.10	use technology to enhance productivity by selecting appropriate tools to create and communicate
CTE.4.1.11	work productively in teams while using cultural/global competence
CTE.4.1.11.a	engage with learners from diverse cultures through use of available technology
CTE.4.1.11.b	explain how personal and cultural histories can influence team approaches to completing tasks and projects

FIFTH GRADE

CTE.5	CAREER AND TECHNICAL EDUCATION STANDARDS FOR FIFTH GRADE
CTE.5.1	The career and technical education standards for fifth grade are that each student will
CTE.5.1.1	act as a responsible and contributing citizen and employee
CTE.5.1.1.a	identify activities and behaviors that build and strengthen community
CTE.5.1.1.b	define employability skills
CTE.5.1.2	apply appropriate academic and technical skills
CTE.5.1.2.a	read and comprehend a variety of resources to explain procedures, ideas, or concepts in Career Pathways
CTE.5.1.2.b	construct charts, tables, and graphs using mathematical data
CTE.5.1.2.c	apply scientific methods including data gathering, direct and indirect observation, and prediction to solve workplace problems
CTE.5.1.3	attend to personal health and financial well-being by modeling the interrelationships between mental, emotional, social, cultural, intellectual, and physical health
CTE.5.1.4	communicate clearly, effectively, and with reason
CTE.5.1.4.a	apply safety, responsibility, and ethical use of information to communicate knowledge of Career Pathways
CTE.5.1.4.b	demonstrate employability skills to interact with team members to accomplish group goals
CTE.5.1.5	consider the environmental, social and economic impacts of decisions by evaluating the effectiveness of safety procedures for different environments and tasks
CTE.5.1.6	demonstrate creativity and innovation by communicating complex ideas in creative ways
CTE.5.1.7	employ valid and reliable research strategies by identifying valid data from multiple sources for a variety of career-related research projects
CTE.5.1.8	utilize critical thinking to make sense of problems and persevere in solving them
CTE.5.1.8.a	interpret data to observe and explain trends
CTE.5.1.8.b	compare and contrast multiple approaches to solving a problem or completing a project
CTE.5.1.8.c	test and refine methods to solve a problem
CTE.5.1.9	model integrity, ethical leadership, and effective management by leading a group activity
CTE.5.1.10	plan education and career paths aligned to personal goals
CTE.5.1.10.a	explore education expectations for different career options
CTE.5.1.10.b	performs basic tasks for personal and workplace communication

CTE.5	CAREER AND TECHNICAL EDUCATION STANDARDS FOR FIFTH GRADE
CTE.5.1.11	use technology to enhance productivity by demonstrating how to work cooperatively and collaboratively with peers when using technology tools
CTE.5.1.12	work productively in teams while using cultural/global competence by collaborate across cultures when setting teamwork roles and goals

SIXTH – EIGHTH GRADES

CTE.6-8	CAREER AND TECHNICAL EDUCATION STANDARDS FOR SIXTH THROUGH EIGHTH GRADE
CTE.6-8.1	The career and technical education standards for sixth through eighth grades are that each student will
CTE.6-8.1.1	act as a responsible and contributing citizen and employee
CTE.6-8.1.1.a	defend choices related to positive, safe, legal, and ethical behavior and
CTE.6-8.1.1.b	practice employability skills
CTE.6-8.1.2	apply appropriate academic and technical skills
CTE.6-8.1.2.a	develop a product using oral, illustrative, or multimedia communications
CTE.6-8.1.2.b	compose well-organized written documents for the workplace
CTE.6-8.1.2.c	communicate mathematical data using charts, tables, and graphs
CTE.6-8.1.2.d	integrate and translate scientific methods to technical data using oral, written, and multimedia communications
CTE.6-8.1.3	attend to personal health and financial well-being
CTE.6-8.1.3.a	investigate the connection between work and financial well-being
CTE.6-8.1.3.b	identify how peers positively or negatively influence personal well-being
CTE.6-8.1.3.c	develop a personal budget and savings plan
CTE.6-8.1.4	communicate clearly, effectively, and with reason
CTE.6-8.1.4.a	apply employability skills to productively interact with all team members to accomplish group goals
CTE.6-8.1.4.b	integrate a variety of multimedia applications to effectively organize and present information
CTE.6-8.1.5	consider the environmental, social and economic impacts of decisions
CTE.6-8.1.5.a	evaluate peer behaviors and exhibit personal responsibility to promote personal and group safety in all environments
CTE.6-8.1.5.b	identify personal protective equipment for workplace, classroom, and personal use, determining when and where it should be utilized
CTE.6-8.1.6	demonstrate creativity and innovation by developing or modifying an existing innovation to improve the workplace
CTE.6-8.1.7	employ valid and reliable research strategies
CTE.6-8.1.7.a	evaluate the accuracy, credibility, perspective, and relevance of information, media, data, and other resources
CTE.6-8.1.7.b	curate information from multiple sources to make meaningful connections and draw conclusions
CTE.6-8.1.7.c	apply fair use and copyright laws
CTE.6-8.1.8	utilize critical thinking to make sense of problems and persevere in solving them
CTE.6-8.1.8.a	analyze trends to draw conclusions and explore solutions to problems
CTE.6-8.1.8.b	analyze and explain how individual behaviors influence processes and environments

CTE.6-8	CAREER AND TECHNICAL EDUCATION STANDARDS FOR SIXTH THROUGH EIGHTH GRADE
CTE.6-8.1.8.c	evaluate resources in testing and refining solutions to problems before asking for assistance
CTE.6-8.1.9	model integrity, ethical leadership, and effective management
CTE.6-8.1.9.a	examine the importance of professional ethics, cultural, and legal responsibilities of the workplace
CTE.6-8.1.9.b	analyze and explain how individual behaviors influence processes and environments
CTE.6-8.1.9.c	describe the diversity of workplace environments
CTE.6-8.1.10	plan education and career paths aligned to personal goals
CTE.6-8.1.10.a	develop programs of study for various Career Pathways, examining outlook, salary, education, job duties, and lifestyle
CTE.6-8.1.10.b	identify job opportunities, and organize and synthesize information about career skills and requirements for applications
CTE.6-8.1.11	use technology to enhance productivity
CTE.6-8.1.11.a	explain how scientific and technological changes impact specific careers
CTE.6-8.1.11b	describe the role of technology within a community in maintaining safe and healthy environments
CTE.6-8.12	work productively in teams while using cultural/global competence
CTE.6-8.1.12.a	evaluate local and global challenges
CTE.6-8.1.12.b	evaluate diversity and inclusion language in documents and policies

NINTH – TWELFTH GRADES

CTE.9-12	CAREER AND TECHNICAL EDUCATION STANDARDS FOR NINTH THROUGH TWELFTH GRADE
CTE.9-12.1	The career and technical education standards for ninth through twelfth grades are that each student will
CTE.9-12.1.1	act as a responsible and contributing citizen and employee
CTE.9-12.1.1.a	engage in positive, safe, legal, and ethical behavior
CTE.9-12.1.1.b	model industry-identified, career-ready skills
CTE.9-12.1.2	apply appropriate academic and technical skills
CTE.9-12.1.2.a	compose clear and coherent documents and presentations appropriate to task, purpose, and audience
CTE.9-12.1.2.b	demonstrate knowledge of mathematical operations needed to succeed in a selected Career Pathway
CTE.9-12.1.2.c	apply appropriate scientific methods in qualitative and quantitative analysis in a selected Career Pathway
CTE.9-12.1.3	attend to personal health and financial well-being
CTE.9-12.1.3.a	evaluate validity of health and financial information, products, and services
CTE.9-12.1.3.b	analyze financial practices including budgeting, banking, savings, investments
CTE.9-12.1.3.c	explain significance in achieving personal and business short- and long-term goals
CTE.9-12.1.3.d	develop financial goals based on lifestyle expectations, education plans, and career choices
CTE.9-12.1.4	communicate clearly, effectively, and with reason
CTE.9-12.1.4.a	model integrity, ethical leadership, and effective employability skills in all communication
CTE.9-12.1.4.b	evaluate and use information systems to prepare technical documents for the workplace
CTE.9-12.1.4.c	model appropriate strategies for communicating persuasively in professional settings to effectively interact with individuals from various cultural, ethnic, and language backgrounds
CTE.9-12.1.4.d	employ awareness of world cultures and languages in work-based learning opportunities
CTE.9-12.1.5	consider the environmental, social, and economic impacts of decisions
CTE.9-12.1.5.a	design and construct safe working environments according to government and industry standards
CTE.9-12.1.5.b	create plans and policies that reflect deep understanding of individual histories and societal complexities in a work environment
CTE.9-12.1.5.c	integrate personal protective equipment use regularly in necessary environments
CTE.9-12.1.6	demonstrate creativity and innovation

CTE.9-12	CAREER AND TECHNICAL EDUCATION STANDARDS FOR NINTH THROUGH TWELFTH GRADE
CTE.9-12.1.6.a	design and implement an innovation
CTE.9-12.1.6.b	evaluate peer innovations and provide feedback
CTE.9-12.1.7	employ valid and reliable research strategies
CTE.9-12.1.7.a	use evidence from multiple sources to defend a position
CTE.9-12.1.7.b	determine various research methodologies based on a defined problem/purpose
CTE.9-12.1.7.c	identify research protocols required to ensure legality, validity, and reliability
CTE.9-12.1.8	utilize critical thinking to make sense of problems and persevere in solving them
CTE.9-12.1.8.a	devise forecasts or solutions to problems that reflect analysis of trends
CTE.9-12.1.8.b	utilize understanding of resources and culture to devise collaborative solutions to problems
CTE.9-12.1.8.c	utilize multiple resources to test and refine solutions to a problem
CTE.9-12.1.9	model integrity, ethical leadership, and effective management
CTE.9-12.1.9.a	apply laws, regulations, and policies to personnel situations that help employees perform their jobs according to employer rules and expectations
CTE.9-12.1.9.b	apply insight to positively influence others' actions, attitudes, and beliefs based on the needs of the workplace
CTE.9-12.1.9.c	create and modify procedures to most effectively function within laws, regulations, and policies
CTE.9-12.1.10	plan education and career paths aligned to personal goals
CTE.9-12.1.10.a	execute a program of study following a Career Pathway, evaluating the opportunities for personal and professional lifelong learning
CTE.9-12.1.10.b	explore the benefits of having a personal or career mentor
CTE.9-12.1.10.c	construct and complete resumes, applications, and other necessary work-related documents
CTE.9-12.1.10.d	evaluate job descriptions that align to a selected Career Pathway and the necessary skill set
CTE.9-12.1.10.e	prepare and practice for, and demonstrate skills needed for job interviews in a selected Career Pathway
CTE.9-12.1.11	use technology to enhance productivity
CTE.9-12.1.11.a	describe how job market changes have resulted from scientific advancements and the increased use of technology in the global economy
CTE.9-12.1.11.b	evaluate the purpose of technology tools and multimedia to analyze their impact on productivity in homes, schools, and workplaces
CTE.9-12.1.11.c	safely and ethically use current industry-standard and emerging technologies
CTE.9-12.1.11.d	model appropriate communication and technological skills to seek, obtain, and change jobs/careers

CTE.9-12	CAREER AND TECHNICAL EDUCATION STANDARDS FOR NINTH THROUGH TWELFTH GRADE
CTE.9-12.1.12	work productively in teams while using cultural/global competence by collaborating to address geographic, economic, cultural, or political issues considering multiple perspective.