

Computer 6 Curriculum Map

Standards	Content	Skills/Practices	Materials/ Resources	Assessments (All) Daily/Weekly/ Benchmarks	Timeline (Months/Weeks/Days)
<p>New York State Career Development and Occupational Studies (CDOS) Standards Intermediate Level</p> <p>Standard 1: Career Development Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions</p> <p>Standard 2: Integrated Learning Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings</p> <p>Standard 3a: Universal</p>	<p><u>Problem Solving and Innovation Unit</u></p> <p>This unit introduces students to problem-solving methods and research. Problem solving can be proactive through design or reactive through troubleshooting. This module will relate invention and innovation to problem solving processes. Students will learn to acquire, critically evaluate, and apply the products of research to make informed problem-solving decisions. Problem-solving skills are essential for all students to develop; they can use formal, iterative, and systemic approaches to solve real-world problems. Current issues related to problem-solving processes, research processes, information access, and information literacy will be examined. Students will have the opportunity to explore the wide variety of career options related to technological invention, innovation, and research and identify the knowledge, skills, education, and training necessary for success within</p>	<p><u>Problem Solving</u> Students will</p> <ol style="list-style-type: none"> a) Describe the scientific method of inquiry as it relates to real-world problem solving b) Define technological problem solving in the context of design and troubleshooting c) Define invention as new designs for technologies and systems d) Define innovation as new applications for existing technologies and systems e) Demonstrate personal development of problem-solving skills through practice of these skills in a variety of classroom applications <p><u>Design Process (Proactive)</u> Students will</p> <ol style="list-style-type: none"> a) Implement a formal design process to solve a given problem by <ol style="list-style-type: none"> a. Defining the problem being addressed b. Defining criteria that must be met through the finished design c. Defining constraints that must be adhered to d. Brainstorming and examining possible solutions e. Selecting the best solution for evaluation 	<p>Chromebook</p> <p>Recycled Materials</p>	<p><u>Week 1</u> Daily Exit Tickets Assessment-Quiz: The Scientific Method of Inquiry</p> <ul style="list-style-type: none"> • Students will be able to define their problem using the language of the SMI <p><u>Week 2</u> Daily Exit Tickets Assessment-Quiz: The Formal Design Process</p> <ul style="list-style-type: none"> • Students will be able to define their problem and proposed solution using the language of the design process <p><u>Week 3</u> Daily Exit Tickets Assessment-Research Sheet</p> <ul style="list-style-type: none"> • Students will create a 150 word paper that describes their analysis of a career path that integrates problem solving, innovation, and design <p><u>Week 4</u> Daily Exit Tickets Assessment-Presentation of Project to the class</p>	<p>4 Weeks</p>

<p>Foundation Skills Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace</p>	<p>these fields.</p> <p>Students identify a problem that requires a designed solution such as a new product that can be made from recycled materials. Students develop a problem statement, constraints and parameters, and proposed solutions. Students develop a model or prototype for testing and optimization, record the process, and present results. Examples of design problems could include a structure, a household item, a planting container, or others.</p> <p><u>Guiding Question</u> What knowledge and skills are necessary to demonstrate introductory understanding of the application of problem-solving processes and the acquisition, evaluation, and application of the products of research for informed decision making?</p>	<p>f. Developing and constructing a prototype or model of the selected design g. Testing and evaluating the prototype and model against the design criteria and constraints h. Optimizing the solution for best form and function i. Evaluating their use of the design process and how it impacted their final solutions</p> <p>b) Demonstrate personal development of design skills through practice of these skills in a variety of classroom applications</p> <p><u>Careers in Problem Solving, Invention, and Innovation</u> Students will a) Investigate knowledge, skills, and practices needed for a career utilizing problem solving, invention, and innovation skills b) Analyze career paths requiring skills for problem solving, invention, and innovation c) Evaluate personal skills, abilities, and interests for employment opportunities utilizing skills for problem solving, invention, and innovation</p>			
<p>New York State Career Development and Occupational Studies (CDOS)</p>	<p><u>Career and Community Connections</u> This unit introduces students to a variety of careers and provides students opportunities</p>	<p><u>The Work World</u> Students will a) Describe reasons for working in paid and unpaid work environments</p>	<p>Chromebook</p>	<p><u>Week 5</u> Daily Exit Tickets Assessment-Quiz: The World of Work ● Students will be able</p>	<p>4 Weeks</p>

<p>Standards Intermediate Level</p> <p>Standard 1: Career Development Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions</p> <p>Standard 2: Integrated Learning Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings</p> <p>Standard 3a: Universal Foundation Skills Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace</p>	<p>to explore their personal goals, interests, and work-world plans. Current issues related to societal, economic, and technological changes impacting employment will be examined. Students will explore the wide variety of career options related to the 16 national career clusters and will identify the knowledge, skills, education, and training necessary for success within these fields.</p> <p><u>Guiding Question</u> What knowledge and skills are necessary to demonstrate introductory understanding of the influences that societal, economic, and technological changes have on employment and the impact that employability skills, interests, and aptitudes have on individuals' career choices and postsecondary options?</p>	<p>b) Discuss the value of work as it relates to the individual and to society c) Compare the similarities and differences among home, school, community, and work environments d) Identify changes likely to occur in home, school, and community environments that will likely change work environments in the future</p> <p><u>Career Clusters</u> Students will a) Identify and use career resources to obtain information about careers and employment trends b) Understand the term "career cluster" and describe how and why specific careers are grouped together c) Examine the 16 national career clusters and their use in guiding initial career planning d) Identify clusters for further investigation based on personal interests</p> <p>3. Employability Skills Students will a) Identify personal characteristics such as abilities, interests, and values and examine how they might impact career choices b) Describe characteristics and behaviors that enable individuals to contribute to the success of a group in a variety of community and work situations c) List and</p>		<p>explain the purposes of work and the shifting environments of the world of work</p> <p><u>Week 6</u> Daily Exit Tickets Assessment-Quiz: Career Clusters</p> <ul style="list-style-type: none"> Students will be able to define the term career cluster and the personal characteristics that might benefit each cluster <p><u>Week 7</u> Daily Exit Tickets Assessment-Class Presentation: Career Clusters</p> <ul style="list-style-type: none"> Students will choose one cluster to become an expert on and present to the rest of the class <p><u>Week 8</u> Daily Exit Tickets Assessment-Class Presentation: Career Plan</p> <ul style="list-style-type: none"> Students will present a career plan derived from their career cluster presentation from week 7. 	
---	--	--	--	---	--

		<p>describe employability skills and ways they benefit individuals in community and work situations</p> <p>d) Demonstrate personal development of employability skills through practice of these skills in a variety of classroom applications</p> <p><u>Career Plans</u> Students will</p> <p>a) Examine potential career choices to determine knowledge, skills, and abilities associated with each</p> <p>b) Assess personal characteristics such as interests, abilities, and aptitudes in relation to characteristics associated with careers of interest</p> <p>c) Examine model career plan formats, including the NYS Career Plan, and explain the purpose of developing a personal career plan</p> <p>d) Formulate a personal career plan that includes short-term and long-term goals needed to carry out the career plan 5.</p>			
<p>International Technology and Engineering Educators Association Standards for Technological Literacy</p> <p>The Nature of</p>	<p><u>Common Sense Media Unit</u> This unit will focus on practical considerations around computer use in middle school. Some of the content covered will be the following:</p> <ul style="list-style-type: none"> • How to protect yourself from phishing scams • How companies collect and use your data 	<p><u>Don't Feed The Phish</u></p> <ul style="list-style-type: none"> • Compare and contrast identity theft with other kinds of theft. • Describe different ways that identity theft can occur online. • Use message clues to identify examples of phishing. 	<p>Chromebook</p> <p>Family Activities</p> <p>Family Tips</p> <p>Family Engagement Resources</p>	<p><u>Don't Feed The Phish</u> Practice Quiz Lesson Quiz</p> <p><u>Big, Big Data</u> Lesson Quiz</p> <p><u>Who Are You Online?</u> Lesson Quiz</p>	2 Weeks

<p>Technology</p> <p>3. Students will develop an understanding of the relationships among technologies and the connections between technology and other fields Technology and Society</p> <p>4. Students will gain an understanding of the cultural, social, economic, and political effects of technology G. Economics, political, and cultural issues are influenced by the development and use of technology</p> <p>6. Students will gain an understanding of the role of society in the development and use of technology D. Throughout history, new technologies have resulted from the</p>	<ul style="list-style-type: none"> • Different ways of presenting yourself online • Our digital footprints and shaping what others see about us online • Finding and using credible information on the internet • Balancing digital media use in our lives • De-escalating digital drama 	<p>Big, Big Data</p> <ul style="list-style-type: none"> • Explain why information about them and their behaviors is valuable to companies. • Analyze how certain types of data are used by companies. • Learn three strategies to limit individual data collection by companies. <p>Who Are You Online?</p> <ul style="list-style-type: none"> • Reflect on reasons why people might create fake social media accounts. • Identify the possible results of posting from a fake social media account. • Debate the benefits and drawbacks of posting from multiple accounts. <p>The Power of Digital Footprints</p> <ul style="list-style-type: none"> • Define the term "digital footprint" and explain how it can affect their online privacy. • Analyze how different parts of their digital footprint can lead others to draw conclusions -- both positive and negative -- about who they are. • Use the Take a Stand thinking routine to examine a dilemma about digital footprints. 		<p>The Power of Digital Footprints Lesson Quiz</p> <p>Finding Credible News Lesson Quiz</p> <p>Finding Balance in a Digital World Lesson Quiz</p> <p>Digital Drama Unplugged Lesson Quiz</p>	
--	---	---	--	--	--

demands, values, and interests of individuals, businesses, industries, and societies

Finding Credible News

- Learn reasons that people put false or misleading information on the internet.
- Learn criteria for differentiating fake news from credible news.
- Practice evaluating the credibility of information they find on the internet.

Finding Balance in a Digital World

- Reflect on their common online and offline activities.
- Identify ways to "unplug" to maintain balance between online and offline activities.
- Use the Digital Habits Checkup routine to create a personal challenge to achieve more media balance.

Digital Drama Unplugged

- Reflect on how easily drama can escalate online.
- Identify de-escalation strategies when dealing with digital drama.
- Reflect on how digital drama can affect not only oneself but also those around us.