

**Technology & Career Readiness &
21st Century Skills Standards Curriculum Appendix**

2014 New Jersey Core Curriculum Content Standards – Technology

Content Area		Technology	
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.	
Strand		A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i>	
Grade Level bands	Content Statement Students will:	Indicator	Indicator
P	Understand and use technology systems.	8.1.P.A.1	Use an input device to select an item and navigate the screen
		8.1.P.A.2	Navigate the basic functions of a browser.
	Select and use applications effectively and productively.	8.1.P.A.3	Use digital devices to create stories with pictures, numbers, letters and words.
		8.1.P.A.4	Use basic technology terms in the proper context in conversation with peers and teachers (e.g., camera, tablet, Internet, mouse, keyboard, and printer).
		8.1.P.A.5	Demonstrate the ability to access and use resources on a computing device.
K-2	Understand and use technology systems.	8.1.2.A.1	Identify the basic features of a digital device and explain its purpose.
		8.1.2.A.2	Create a document using a word processing application.
	Select and use applications effectively and productively.	8.1.2.A.3	Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.
		8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
		8.1.2.A.5	Enter information into a spreadsheet and sort the information.
		8.1.2.A.6	Identify the structure and components of a database.
		8.1.2.A.7	Enter information into a database or spreadsheet and filter the information.
3-5	Understand and use technology systems.	8.1.5.A.1	Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
		8.1.5.A.2	Format a document using a word processing application to enhance text and include graphics, symbols and/ or pictures.
	Select and use applications effectively and productively.		

		8.1.5.A.3	Use a graphic organizer to organize information about problem or issue.
		8.1.5.A.4	Graph data using a spreadsheet, analyze and produce a report that explains the analysis of the data.
		8.1.5.A.5	Create and use a database to answer basic questions.
		8.1.5.A.6	Export data from a database into a spreadsheet; analyze and produce a report that explains the analysis of the data.
6-8	Understand and use technology systems.	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
	Select and use applications effectively and productively.	8.1.8.A.2	Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability.
		8.1.8.A.3	Use and/or develop a simulation that provides an environment to solve a real world problem or theory.
		8.1.8.A.4	Graph and calculate data within a spreadsheet and present a summary of the results
		8.1.8.A.5	Create a database query, sort and create a report and describe the process, and explain the report results.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	B. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.		
Grade Level bands	Content Statement Students will:	Indicator	Indicator
P	Apply existing knowledge to generate new ideas, products, or processes. Create original works as a means of personal or group expression.	8.1.P.B.1	Create a story about a picture taken by the student on a digital camera or mobile device.
K-2		8.1.2.B.1	Illustrate and communicate original ideas and stories using multiple digital tools and resources .
3-5		8.1.5.B.1	Collaborative to produce a digital story about a significant local event or issue based on first-person interviews.
6-8		8.1.8.B.1	Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web).
9-12		8.1.12.B.2	Apply previous content knowledge by creating and piloting a digital learning game

			or tutorial.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	C. Communication and Collaboration: <i>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</i>		
Grade Level bands	Content Statement	Indicator	Indicator
P	Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media. Communicate information and ideas to multiple audiences using a variety of media and formats. Develop cultural understanding and global awareness by engaging with learners of other cultures. Contribute to project teams to produce original works or solve problems.	8.1.P.C.1	Collaborate with peers by participating in interactive digital games or activities.
K-2		8.1.2.C.1	Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using various media formats such as online collaborative tools, and social media.
3-5		8.1.5.C.1	Engage in online discussions with learners of other cultures to investigate a worldwide issue from multiple perspectives and sources, evaluate findings and present possible solutions, using digital tools and online resources for all steps.
6-8		8.1.8.C.1	Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	D. Digital Citizenship: <i>Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</i>		
Grade Level bands	Content Statement	Indicator	Indicator
K-2	Advocate and practice safe, legal, and responsible use of information and technology.	8.1.2.D.1	Develop an understanding of ownership of print and nonprint information.
3-5	Advocate and practice safe, legal, and responsible use of information and technology.	8.1.5.D.1	Understand the need for and use of copyrights.
		8.1.5.D.2	Analyze the resource citations in online materials for proper use.
	Demonstrate personal	8.1.5.D.3	Demonstrate an understanding of the need to

	responsibility for lifelong learning.		practice cyber safety, cyber security, and cyber ethics when using technologies and social media.
	Exhibit leadership for digital citizenship.	8.1.5.D.4	Understand digital citizenship and demonstrate an understanding of the personal consequences of inappropriate use of technology and social media.
6-8	Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
	Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
		8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
	Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
		8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
Content Area	Technology		
Standard	8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.		
Strand	E: Research and Information Fluency: <i>Students apply digital tools to gather, evaluate, and use information.</i>		
Grade Level bands	Content Statement Students will:	Indicator	Indicator
P	Plan strategies to guide inquiry.	8.1.P.E.1	Use the Internet to explore and investigate questions with a teacher's support.
K-2	Plan strategies to guide inquiry Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. Evaluate and select information sources and digital tools based on the appropriateness for specific tasks.	8.1.2.E.1	Use digital tools and online resources to explore a problem or issue.
3-5	Plan strategies to guide inquiry. Locate, organize, analyze, evaluate, synthesize, and	8.1.5.E.1	Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of

	ethically use information from a variety of sources and media. Evaluate and select information sources and digital tools based on the appropriateness for specific tasks.		tasks.
6-8	Plan strategies to guide inquiry. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. Evaluate and select information sources and digital tools based on the appropriateness for specific tasks. Process data and report results.	8.1.8.E.1	Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem.
Content Area		Technology	
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.	
Strand		F: Critical thinking, problem solving, and decision making: <i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</i>	
Grade Level bands	Content Statement Students will:	Indicator	Indicator
K-2	Identify and define authentic problems and significant questions for investigation. Plan and manage activities to develop a solution or complete a project. Collect and analyze data to identify solutions and/or make informed decisions. Use multiple processes and diverse perspectives to explore alternative solutions.	8.1.2.F.1	Use geographic mapping tools to plan and solve problems.
3-5	Identify and define authentic problems and significant questions for investigation. Plan and manage activities	8.1.5.F.1	Apply digital tools to collect, organize, and analyze data that support a scientific finding.

	<p>to develop a solution or complete a project. Collect and analyze data to identify solutions and/or make informed decisions. Use multiple processes and diverse perspectives to explore alternative solutions</p>		
6-8	<p>Identify and define authentic problems and significant questions for investigation. Plan and manage activities to develop a solution or complete a project. Collect and analyze data to identify solutions and/or make informed decisions. Use multiple processes and diverse perspectives to explore alternative solutions.</p>	8.1.8.F.1	<p>Explore a local issue, by using digital tools to collect and analyze data to identify a solution and make an informed decision.</p>

21st CENTURY LIFE AND CAREERS

9.1 PERSONAL FINANCIAL LITERACY	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS
STRAND A:	INCOME AND CAREERS
NUMBER	STANDARD STATEMENT
<i>By the end of Grade 4, students will be able to:</i>	
9.1.4.A.1	Explain the difference between a career and a job, and identify various jobs in the community and the related earnings.
9.1.4.A.2	Identify potential sources of income.
9.1.4.A.3	Explain how income affects spending and take-home pay.
<i>By the end of Grade 8, students will be able to:</i>	
9.1.8.A.1	Explain the meaning and purposes of taxes and tax deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay.
9.1.8.A.2	Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.
9.1.8.A.3	Differentiate among ways that workers can improve earning power through the acquisition of new knowledge and skills.
9.1.8.A.4	Relate earning power to quality of life across cultures.
9.1.8.A.5	Relate how the demand for certain skills determines an individual's earning power.
9.1.8.A.6	Explain how income affects spending decisions.
9.1.8.A.7	Explain the purpose of the payroll deduction process, taxable income, and employee benefits.

9.1 PERSONAL FINANCIAL LITERACY	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS

STRAND B:	MONEY MANAGEMENT
NUMBER	STANDARD STATEMENT
<i>By the end of Grade 4, students will be able to:</i>	
9.1.4.B.1	Differentiate between financial wants and needs.
9.1.4.B.2	Identify age-appropriate financial goals.
9.1.4.B.3	Explain what a budget is and why it is important.
9.1.4.B.4	Identify common household expense categories and sources of income.
9.1.4.B.5	Identify ways to earn and save.
<i>By the end of Grade 8, students will be able to:</i>	
9.1.8.B.1	Distinguish among cash, check, credit card, and debit card.
9.1.8.B.2	Construct a simple personal savings and spending plan based on various sources of income.
9.1.8.B.3	Justify the concept of “paying yourself first” as a financial savings strategy.
9.1.8.B.4	Relate the concept of deferred gratification to [investment,] meeting financial goals, and building wealth.
9.1.8.B.5	Explain the effect of the economy on personal income, individual and family security, and consumer decisions.
9.1.8.B.6	Evaluate the relationship of cultural traditions and historical influences on financial practice.
9.1.8.B.7	Construct a budget to save for long-term, short-term, and charitable goals.
9.1.8.B.8	Develop a system for keeping and using financial records.
9.1.8.B.9	Determine the most appropriate use of various financial products and services (e.g., ATM, debit cards, credit cards, check books).
9.1.8.B.10	Justify safeguarding personal information when using credit cards, banking electronically, or filing forms.
9.1.8.B.11	Evaluate the appropriate financial institutions to assist with meeting various personal financial needs and goals.

9.1 PERSONAL FINANCIAL LITERACY	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS
STRAND C:	CREDIT AND DEBT MANAGEMENT
NUMBER	STANDARD STATEMENT

<i>By the end of Grade 4, students will be able to:</i>	
9.1.4.C.1	Explain why people borrow money and the relationship between credit and debt.
9.1.4.C.2	Identify common sources of credit (e.g., banks, credit card companies) and types of credit (e.g., loans, credit cards, mortgages).
9.1.4.C.3	Compare and contrast credit cards and debit cards and the advantages and disadvantages of using each.
9.1.4.C.4	Determine the relationships among income, expenses, and interest.
9.1.4.C.5	Determine personal responsibility related to borrowing and lending.
9.1.4.C.6	Summarize ways to avoid credit problems.
<i>By the end of Grade 8, students will be able to:</i>	
9.1.8.C.1	Compare and contrast credit cards and debit cards and the advantages and disadvantages of using each.
9.1.8.C.2	Compare and contrast the financial products and services offered by different types of financial institutions.
9.1.8.C.3	Compare and contrast debt and credit management strategies.
9.1.8.C.4	Demonstrate an understanding of the terminology associated with different types of credit (e.g., credit cards, installment loans, mortgages) and compare the interest rates associated with each.
9.1.8.C.5	Calculate the cost of borrowing various amounts of money using different types of credit (e.g., credit cards, installment loans, mortgages).
9.1.8.C.6	Determine ways to leverage debt beneficially.
9.1.8.C.7	Determine potential consequences of using “easy access” credit (e.g., using a line of credit vs. obtaining a loan for a specific purpose).
9.1.8.C.8	Explain the purpose of a credit score and credit record, and summarize borrowers’ credit report rights.
9.1.8.C.9	Summarize the causes and consequences of personal bankruptcy.
9.1.8.C.10	Determine when there is a need to seek credit counseling and appropriate times to utilize it.

9.1 PERSONAL FINANCIAL LITERACY
21st CENTURY LIFE AND CAREERS
PLANNING, SAVING, AND INVESTING
STANDARD STATEMENT

By the end of Grade 4, students will be able to:

Determine various ways to save.

Explain what it means to “invest.”

Distinguish between saving and investing.

By the end of Grade 8, students will be able to:

Determine how saving contributes to financial well-being.

Differentiate among various savings tools and how to use them most effectively.

Differentiate among various investment options.

Distinguish between income and investment growth.

9.1 PERSONAL FINANCIAL LITERACY

CONTENT AREA: 21st CENTURY LIFE AND CAREERS

STRAND E: BECOMING A CRITICAL CONSUMER

NUMBER STANDARD STATEMENT

By the end of Grade 4, students will be able to:

9.1.4.E.1 Determine factors that influence consumer decisions related to money.

9.1.4.E.2 Apply comparison shopping skills to purchasing decisions.

By the end of Grade 8, students will be able to:

9.1.8.E.1 Explain what it means to be a responsible consumer and the factors to consider when making consumer decisions.

9.1.8.E.2 Identify personal information that should not be disclosed to others and the possible consequences of doing or not doing so.

9.1.8.E.3 Compare and contrast product facts versus advertising claims.

9.1.8.E.4 Prioritize personal wants and needs when making purchases.

9.1.8.E.5 Analyze interest rates and fees associated with financial services, credit cards, debit cards, and gift cards.

9.1.8.E.6 Compare the value of goods or services from different sellers when purchasing large quantities and small quantities.

9.1.8.E.7 Evaluate how fraudulent activities impact consumers, and justify the creation of consumer protection laws.

9.1.8.E.8 Recognize the techniques and effects of deceptive advertising.

9.1 PERSONAL FINANCIAL LITERACY	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS
STRAND F:	CIVIC FINANCIAL RESPONSIBILITY
NUMBER	STANDARD STATEMENT
<i>By the end of Grade 4, students will be able to:</i>	
9.1.4.F.1	Demonstrate an understanding of individual financial obligations and community financial obligations.
9.1.4.F.2	Explain the roles of philanthropy, volunteer service, and charitable contributions, and analyze their impact on community development and quality of living.
<i>By the end of Grade 8, students will be able to:</i>	
9.1.8.F.1	Explain how the economic system of production and consumption may be a means to achieve significant societal goals.
9.1.8.F.2	Examine the implications of legal and ethical behaviors when making financial decisions.
9.1.8.F.3	Relate the impact of business, government, and consumer fiscal responsibility to the economy and to personal finance.

9.1 PERSONAL FINANCIAL LITERACY	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS
STRAND G:	INSURING AND PROTECTING
NUMBER	STANDARD STATEMENT
<i>By the end of Grade 4, students should be able to:</i>	
9.1.4.G.1	Describe how valuable items might be damaged or lost and ways to protect them.
<i>By the end of Grade 8, students will be able to:</i>	
9.1.8.G.1	Explain why it is important to develop plans for protecting current and future personal assets against loss.
9.1.8.G.2	Determine criteria for deciding the amount of insurance protection needed.
9.1.8.G.3	Analyze the need for and value of different types of insurance and the impact of deductibles.
9.1.8.G.4	Evaluate the need for different types of extended warranties.

9.2 CAREER AWARENESS, EXPLORATION, AND PREPARATION	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS
STRAND A:	CAREER AWARENESS
NUMBER	STANDARD STATEMENT
<i>By the end of Grade 4, students will be able to:</i>	
9.2.4.A.1	Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.
9.2.4.A.2	Identify various life roles and civic and work-related activities in the school, home, and community.
9.2.4.A.3	Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.
9.2.4.A.4	Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

9.2 CAREER AWARENESS, EXPLORATION, AND PREPARATION	
CONTENT AREA:	21st CENTURY LIFE AND CAREERS
STRAND B:	CAREER EXPLORATION
NUMBER	STANDARD STATEMENT
<i>By the end of Grade 8, students will be able to:</i>	
9.2.8.B.1	Research careers within the 16 Career Clusters [®] and determine attributes of career success.
9.2.8.B.2	Develop a Personalized Student Learning Plan with the assistance of an adult mentor that includes information about career areas of interest, goals and an educational plan.
9.2.8.B.3	Evaluate communication, collaboration, and leadership skills that can be developed through school, home, work, and extracurricular activities for use in a career.

9.2.8.B.4	Evaluate how traditional and nontraditional careers have evolved regionally, nationally, and globally.
9.2.8.B.5	Analyze labor market trends using state and federal labor market information and other resources available online.
9.2.8.B.6	Demonstrate understanding of the necessary preparation and legal requirements to enter the workforce.
9.2.8.B.7	Evaluate the impact of online activities and social media on employer decisions.