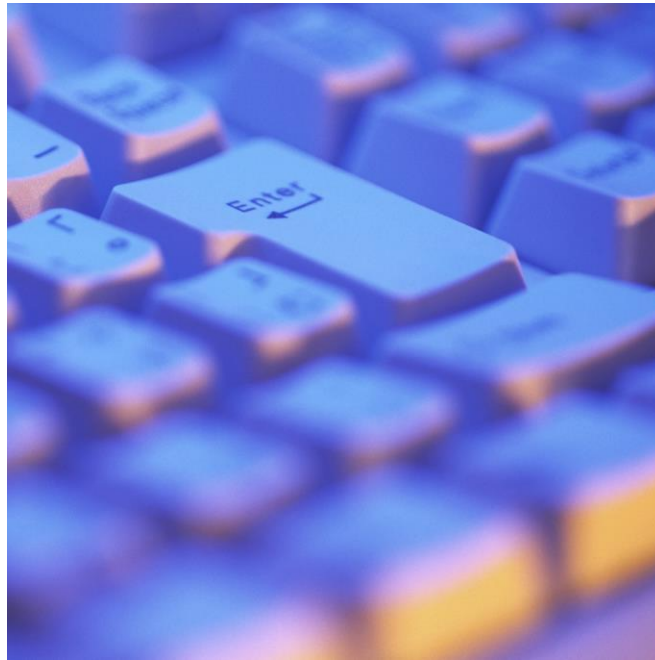


Plainfield Public Schools  
*Educational Services*

# *Curriculum Pacing Guide*



*Technology*  
*Fourth Grade*  
*2016-2017*

Plainfield Public Schools  
Educational Services  
Curriculum Pacing Guide

## The Board of Education for Plainfield Public Schools



Plainfield Public Schools  
Educational Services  
Curriculum Pacing Guide

## FOURTH GRADE CURRICULUM PACING OVERVIEW

This document provides a pacing guide for instruction involving fourth grade students. It includes the content addressed in the fourth grade New Jersey Core Curriculum Content Standards (NJCCCS). It is designed to help teachers in pacing instruction of what students are expected to know and be able to use in technology for the entire year.

### **Purpose of the Fourth Grade Technology Curriculum Pacing Guide**

The Fourth Grade **Technology Curriculum Pacing Guide** was formulated for the purpose of providing fourth grade teachers with a guide for pacing instruction throughout the year. It will serve as a “road map” to help teachers develop fourth grade concepts and processes through instruction and practice. The Division of Educational Services responded to the request of administrators and teachers in the District to create a guide that would serve as a resource for teachers.

### **Description of the Fourth Grade Technology Curriculum Pacing Guide**

The Fourth Grade Technology Curriculum Pacing Guide specifies the New Jersey Core Curriculum Content Standards (NJCCCS) Cumulative Progress Indicators (CPIs), Objectives, and Standards/Strands taught during each instructional quarter.

- Column One: Standard/Strands  
Identifies the Standard and Strands as required by the NJCCCS.
- Column Two: Objectives  
Identifies the specific, measurable objectives to be addressed in lessons.
- Column Three: CPIs  
Contains the NJCCCS CPIs for fourth grade.

## **Suggestions for Implementing the Fourth Grade Technology Curriculum Pacing Guide**

The role of the teacher is to:

- teach the NJCCCS content matter;
- provide classroom activities that address the NJCCCS;
- enhance curriculum by using textbooks, manipulatives, technology, and other instructional materials;
- use varying methods of instruction to address diverse learning styles; and
- administer teacher-made assessments

In addition to using the **Fourth Grade Technology Curriculum Pacing Guide**, teachers should:

- consider intra-school collaborative planning and spiraling of the curriculum to ensure efficient and effective pacing and delivery of instruction;
- adjust pacing and discuss progress with peers;
- document questions and suggested improvement of the guide for further support and future revisions; and
- align and connect mathematics literature to support reading.

# FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

## Grade 4: First Quarter

Standard/Strands	Objectives	Strand Letter/CPI
<p><b>8.1 (COMPUTER AND INFORMATION LITERACY)</b> ALL STUDENTS WILL USE COMPUTER APPLICATIONS TO GATHER AND ORGANIZE INFORMATION AND TO SOLVE PROBLEMS.</p> <p style="text-align: center;"><b>Strand(s)</b></p> <p>A. Basic Computer Skills and Tools B. Application and Productivity Tools</p>	<p><b>The fourth grade student will be able to:</b></p> <ul style="list-style-type: none"> <li>• use computer vocabulary</li> <li>• operate a mouse (click, double click, click and drag, click and hold, highlight, scroll wheel)</li> <li>• demonstrate proper sequence for turning on and turning off computers and other peripherals</li> <li>• list the rules for proper care of computer equipment</li> <li>• identify and use input devices such as floppy disk drive, mouse, keyboard, cd/dvd drive, scanner, and microphone</li> <li>• identify and use output devices such as floppy disk drive, monitor, printer, cd/dvd drive, headphones, and speakers</li> <li>• identify the different functions of a keyboard (enter, space bar, control, alt, delete, backspace, Esc, arrows, shift, and caps lock)</li> <li>• print, save, retrieve, and delete files</li> <li>• import graphics from clip art galleries</li> <li>• understand basic navigation of the operating system (start menu, desktop, toolbars)</li> <li>• exhibit proper posture and use both hands on the keyboard</li> <li>• identify, discuss, and visually represent uses of technology in the community</li> <li>• understand and follow classroom rules for technology use</li> <li>• explain acceptable use of the computer</li> </ul>	<p>8.1.4.A.1 Use basic technology vocabulary.</p> <p>8.1.4.A.2 Use basic features of an operating system (e.g., accessing programs, identifying and selecting a printer, finding help).</p> <p>8.1.4.A.9 Use basic computer icons.</p> <p>8.1.4.B.1 Discuss the common uses of computer applications and identify their advantages and disadvantages.</p> <p>8.1.4.B.2 Recognize and practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use.</p>
<p><b>8.2 (TECHNOLOGY EDUCATION)</b> ALL STUDENTS WILL DEVELOP AN UNDERSTANDING OF THE NATURE AND IMPACT OF TECHNOLOGY, ENGINEERING, TECHNOLOGICAL DESIGN, AND THE DESIGNED WORLD AS THEY RELATE TO THE INDIVIDUAL,</p>	<p><b>The fourth grade student will be able to:</b></p> <ul style="list-style-type: none"> <li>• discuss how scientists and inventors have contributed to science and technology</li> <li>• explain and write about scientists and inventors throughout history</li> <li>• distinguish between things that occur in nature and those that have</li> </ul>	<p>8.2.4 Refer to Science Standards 5.2 and 5.4</p> <p>5.2.4.A.1 Describe how people in different cultures have made and continue to make contributions to science and technology.</p> <p>5.2.4.B.1 Hear, read, write, and</p>

## FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

<b>Standard/Strands</b>	<b>Objectives</b>	<b>Strand Letter/CPI</b>
SOCIETY, AND THE ENVIRONMENT. <b>Strand(s)</b> <b>A.</b> Nature and Impact of Technology <b>B.</b> Design Process and Impact Assessment <b>C.</b> Systems in the Designed World	<b>been designed to solve human problems</b>	talk about scientists and inventors in historical context. 5.4.4.A.1 Distinguish between things that occur in nature and those that have been designed to solve human problems.

# FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

## Grade 4: Second Quarter

Standard/Strands	Objectives	Strand Letter/CPI
<p><b>8.1 (COMPUTER AND INFORMATION LITERACY)</b> ALL STUDENTS WILL USE COMPUTER APPLICATIONS TO GATHER AND ORGANIZE INFORMATION AND TO SOLVE PROBLEMS.</p> <p style="text-align: center;"><b>Strand(s)</b></p> <p><b>A.</b> Basic Computer Skills and Tools <b>B.</b> Application and Productivity Tools</p>	<p>The fourth grade student will be able to:</p> <ul style="list-style-type: none"> <li>• use the correct hand and body position while applying the proper touch method of keying for the homerow keys, row above, and row below</li> <li>• type words consisting of the homerow keys, the row below, and the row above using the proper touch keying technique for the development of speed</li> <li>• proofread and correct errors using backspace, delete, and undo</li> <li>• produce and edit simple documents and presentations</li> <li>• list ways technology makes life easier</li> <li>• compare and contrast the advantages and disadvantages of the use of technology</li> <li>• discuss copyright laws</li> <li>• identify and discuss appropriate and safe behaviors</li> <li>• explain how pop-up windows happen and how to respond to them</li> <li>• discuss the purpose of virus protection software</li> <li>• explain acceptable use of the computer</li> </ul>	<p>8.1.4.A.1 Use basic technology vocabulary. 8.1.4.A.2 Use basic features of an operating system (e.g., accessing programs, identifying and selecting a printer, finding help). 8.1.4.A.3 Input and access text and data using appropriate keyboarding techniques or other input devices. 8.1.4.A.9 Use basic computer icons. 8.1.4.B.1 Discuss the common uses of computer applications and identify their advantages and disadvantages. 8.1.4.B.2 Recognize and practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use.</p>
<p><b>8.2 (TECHNOLOGY EDUCATION)</b> ALL STUDENTS WILL DEVELOP AN UNDERSTANDING OF THE NATURE AND IMPACT OF TECHNOLOGY, ENGINEERING, TECHNOLOGICAL DESIGN, AND THE DESIGNED WORLD AS THEY RELATE TO THE INDIVIDUAL, SOCIETY, AND THE ENVIRONMENT.</p> <p style="text-align: center;"><b>Strand(s)</b></p> <p><b>A.</b> Nature and Impact of Technology <b>B.</b> Design Process and Impact Assessment <b>C.</b> Systems in the Designed World</p>	<p>The fourth grade student will be able to:</p> <ul style="list-style-type: none"> <li>• discuss how scientists and inventors have contributed to science and technology</li> <li>• explain and write about scientists and inventors throughout history</li> <li>• demonstrate how measuring instruments are used to gather information in order to design things that work properly</li> </ul>	<p>8.2.4 Refer to Science Standards 5.2 and 5.4 5.2.4.A.1 Describe how people in different cultures have made and continue to make contributions to science and technology. 5.2.4.B.1 Hear, read, write, and talk about scientists and inventors in historical context. 5.4.4.B.1 Demonstrate how measuring instruments are used to gather information in order to design things that work properly.</p>

## FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

Standard/Strands	Objectives	Strand Letter/CPI
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### Grade 4: Third Quarter

Standard/Strands	Objectives	Strand Letter/CPI
<p><b>8.1 (COMPUTER AND INFORMATION LITERACY)</b> ALL STUDENTS WILL USE COMPUTER APPLICATIONS TO GATHER AND ORGANIZE INFORMATION AND TO SOLVE PROBLEMS.</p> <p style="text-align: center;"><b>Strand(s)</b></p> <p>A. Basic Computer Skills and Tools B. Application and Productivity Tools</p>	<p><b>The fourth grade student will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>identify and discuss the benefits of networked and non-networked computers</b></li> <li>• <b>recognize, discuss, and use network terms/concepts such as stand-alone, network, network resources, etc</b></li> <li>• <b>identify the influence and effects of technology on everyday life and learning</b></li> <li>• <b>explore technology related careers</b></li> <li>• <b>use the internet to access information</b></li> <li>• <b>explain acceptable use of the computer</b></li> </ul>	<p>8.1.4.A.1 Use basic technology vocabulary. 8.1.4.A.2 Use basic features of an operating system (e.g., accessing programs, identifying and selecting a printer, finding help). 8.1.4.A.9 Use basic computer icons. 8.1.4.B.1 Discuss the common uses of computer applications and identify their advantages and disadvantages. 8.1.4.B.2 Recognize and practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use.</p>
<p><b>8.2 (TECHNOLOGY EDUCATION)</b> ALL STUDENTS WILL DEVELOP AN UNDERSTANDING OF THE NATURE AND IMPACT OF TECHNOLOGY, ENGINEERING, TECHNOLOGICAL DESIGN, AND THE DESIGNED WORLD AS THEY RELATE TO THE INDIVIDUAL, SOCIETY, AND THE ENVIRONMENT.</p> <p style="text-align: center;"><b>Strand(s)</b></p> <p>A. Nature and Impact of Technology B. Design Process and Impact Assessment C. Systems in the Designed World</p>	<p><b>The fourth grade student will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>discuss how scientists and inventors have contributed to science and technology</b></li> <li>• <b>explain and write about scientists and inventors throughout history</b></li> <li>• <b>describe a product or device in terms of the problem it solves or the need it meets</b></li> <li>• <b>choose materials most suitable to make mechanical constructions</b></li> </ul>	<p>8.2.4 Refer to Science Standards 5.2 and 5.4 5.2.4.A.1 Describe how people in different cultures have made and continue to make contributions to science and technology. 5.2.4.B.1 Hear, read, write, and talk about scientists and inventors in historical context. 5.4.4.C.1 Describe a product or device in terms of the problem it solves or the need it meets. 5.4.4.C.2 Choose materials most suitable to make simple mechanical constructions.</p>



## FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

Standard/Strands	Objectives	Strand Letter/CPI
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### Grade 4: Fourth Quarter

Standard/Strands	Objectives	Strand Letter/CPI
<p><b>8.1 (COMPUTER AND INFORMATION LITERACY)</b> ALL STUDENTS WILL USE COMPUTER APPLICATIONS TO GATHER AND ORGANIZE INFORMATION AND TO SOLVE PROBLEMS.</p> <p style="text-align: center;"><b>Strand(s)</b></p> <p>A. Basic Computer Skills and Tools B. Application and Productivity Tools</p>	<p><b>The fourth grade student will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>use the correct hand and body position while applying the proper touch method of keying for the homerow keys, row above, and row below</b></li> <li>• <b>type words consisting of the homerow keys, the row below, and the row above using the proper touch keying technique for the development of speed</b></li> <li>• <b>exhibit proper posture and fingering techniques for the alphanumeric keyboard</b></li> <li>• <b>review and expand proper touch keying techniques for all rows of the keyboard</b></li> <li>• <b>expand the use of various operating system features (open more than one application/program, menus, taskbar)</b></li> <li>• <b>explain acceptable use of the computer</b></li> <li>• <b>use the internet to access information</b></li> <li>• <b>use different search engines to obtain information</b></li> <li>• <b>practice safe use of electronic equipment</b></li> <li>• <b>identify the various people involved in technological developments</b></li> <li>• <b>explore technology related careers</b></li> </ul>	<p>8.1.4.A.1 Use basic technology vocabulary.</p> <p>8.1.4.A.2 Use basic features of an operating system (e.g., accessing programs, identifying and selecting a printer, finding help).</p> <p>8.1.4.A.3 Input and access text and data using appropriate keyboarding techniques or other input devices.</p> <p>8.1.4.A.4 Produce a simple finished document using word processing software.</p> <p>8.1.4.A.5 Produce and interpret a simple graph or chart by entering and editing data on a prepared spreadsheet template.</p> <p>8.1.4.A.6 Create and present a multimedia presentation using appropriate software.</p> <p>8.1.4.A.7 Create and maintain files and folders.</p> <p>8.1.4.A.8 Use a graphic organizer.</p> <p>8.1.4.A.9 Use basic computer icons.</p> <p>8.1.4.B.1 Discuss the common uses of computer applications and identify their advantages and disadvantages.</p> <p>8.1.4.B.2 Recognize and</p>

## FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

Standard/Strands	Objectives	Strand Letter/CPI
		<p>practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use.</p> <p>8.1.4.B.3 Practice appropriate internet etiquette.</p> <p>8.1.4.B.4 Recognize the ethical and legal implications of plagiarism of copyrighted materials.</p> <p>8.1.4.B.5 Recognize the need for accessing and using information.</p> <p>8.1.4.B.6 Identify and use web browsers, search engines, and directories to obtain information to solve real world problems.</p> <p>8.1.4.B.7 Locate specific information by searching a database.</p> <p>8.1.4.B.8 Recognize accuracy and/or bias of information.</p> <p>8.1.4.B.9 Solve problems individually and/or collaboratively using computer applications.</p> <p>8.1.4.B.10 Identify basic hardware problems and solve simple problems.</p>
<p><b>8.2 (TECHNOLOGY EDUCATION)</b> ALL STUDENTS WILL DEVELOP AN UNDERSTANDING OF THE NATURE AND IMPACT OF TECHNOLOGY, ENGINEERING, TECHNOLOGICAL DESIGN, AND THE DESIGNED WORLD AS THEY RELATE TO THE INDIVIDUAL, SOCIETY, AND THE ENVIRONMENT.</p>	<p><b>The fourth grade student will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>discuss how scientists and inventors have contributed to science and technology</b></li> <li>• <b>explain and write about scientists and inventors throughout history</b></li> <li>• <b>use the design process to identify a problem, look for ideas, and develop and share solutions with others</b></li> </ul>	<p>8.2.4 Refer to Science Standards 5.2 and 5.4</p> <p>5.2.4.A.1 Describe how people in different cultures have made and continue to make contributions to science and technology.</p> <p>5.2.4.B.1 Hear, read, write, and talk about scientists and inventors in historical context.</p> <p>5.4.4.C.3 Use the design process to identify a problem, look for ideas, and develop and share solutions with others.</p>
<p style="text-align: center;"><b>Strand(s)</b></p> <p><b>A.</b> Nature and Impact of Technology <b>B.</b> Design Process and Impact Assessment</p>		

## FOURTH GRADE TECHNOLOGY CURRICULUM PACING GUIDE

<b>Standard/Strands</b>	<b>Objectives</b>	<b>Strand Letter/CPI</b>
C. Systems in the Designed World		