COMPUTER CURRICULUM GUIDELINES GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO KINDERGARTEN

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements and the impact of automation on the job market

COMPUTER USAGE

Ι	R	Μ	
			Identify the following terms: computer, monitor, disk drive,
			keyboard, printer, and diskette
			Recognize the location of the on/off switch on the monitor and the
			CPU
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Demonstrate the proper sequence to boot up a disk and/or access
			program network
			Access and use various types of educational software
			independently

KEYBOARDING SKILLS

Ι	R	Μ	
			Recognize letters and numbers on the keyboard
			Recognize and use the special function keys as needed: return, space bar, escape, arrow keys, shift keys, control key, back arrow/delete key
			Use appropriate posture at the keyboard

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO FIRST GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

I R M

_____ List uses of computers in a variety of situations

_____ Identify computer related careers, including training requirements and the impact of automation on the job market

COMPUTER USAGE

Ι	R	Μ	
			Identify the following terms: computer, monitor, disk drive,
			keyboard, printer, and diskette
			Recognize the location of the on/off switch on the monitor and the
			CPU
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Demonstrate the proper sequence to boot up a disk and/or access
			program network
			Access and use various types of educational software
			independently

KEYBOARDING SKILLS

I R M

 Recognize letters and numbers on the keyboard

 Locate and use numbers and letters on the keyboard

 Recognize and use the special function keys as needed: return, space bar, escape, arrow keys, shift keys, control key, back
arrow/delete key
 Use appropriate posture at the keyboard

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO SECOND GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements and the impact of automation on the job market

COMPUTER USAGE

Ι	R	Μ	
			Identify the following terms: computer, monitor, disk drive, keyboard, printer, and diskette
			Recognize the location of the on/off switch on the monitor and the CPU
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Demonstrate the proper sequence to boot up a disk and/or access program network
			Access and use various types of educational software independently

KEYBOARDING SKILLS

Ι	R	Μ	
			Recognize letters and numbers on the keyboard
			Locate and use numbers and letters on the keyboard
			Recognize and use the special function keys as needed: return,
			space bar, escape, arrow keys, shift keys, control key, back
			arrow/delete key

 Identify home row

 Use appropriate posture at the keyboard

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO THIRD GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations Identify computer related careers, including training requirements and the impact of automation on the job market

COMPUTER USAGE

Ι	R	Μ	
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Demonstrate the proper sequence to boot up a disk and/or access
			program network Access and use various types of educational software independently

KEYBOARDING SKILLS

Ι	R	Μ	
			Locate and use punctuation on the keyboard
			Recognize and use the special function keys as needed: return, space bar, escape, arrow keys, shift keys, control key, back
			arrow/delete key
			Identify home row
			Memorize home row
			Use appropriate posture at the keyboard
			Use two hands on the keyboard, use home row as a base and reach for keys with appropriate fingers

_____ Type simple words and short sentences

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO FOURTH GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements
			and the impact of automation on the job market
			Define computer ethics and the purpose of ethical standards
			Explain unethical use of computers, including illegal copying of
			hardware and software, and as in relation to an individual's privacy
			rights

COMPUTER USAGE

Ι	R	Μ	
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Demonstrate the proper sequence to boot up a disk and/or access
			program network
			Access and use various types of educational software
			independently

KEYBOARDING SKILLS

Ι	R	М	
			Locate and use punctuation on the keyboard
			Recognize and use the special function keys as needed: return, space bar, escape, arrow keys, shift keys, control key, back
			arrow/delete key
			Identify home row

			Memorize home row Use appropriate posture at the keyboard
			Use two hands on the keyboard, use home row as a base and reach
			for keys with appropriate fingers
Ι	R	Μ	
			Type simple words and short sentences
		<u> </u>	
			Type sentences and short paragraphs from written material

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO FIFTH GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements
			and the impact of automation on the job market
			Define computer ethics and the purpose of ethical standards
			Explain unethical use of computers, including illegal copying of
			hardware and software, and as in relation to an individual's privacy
			rights

COMPUTER USAGE

Ι	R	Μ	
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Demonstrate the proper sequence to boot up a disk and/or access
			program network
			Access and use various types of educational software
			independently

KEYBOARDING SKILLS

Ι	R	М	
			Use appropriate posture at the keyboard
			Use two hands on the keyboard, use home row as a base and reach
			for keys with appropriate fingers
			Type simple words and short sentences
			Type sentences and short paragraphs from written material

 Type an entire page of text with minimal errors

 Type for improved accuracy

 Type for improved speed

WORD PROCESSING

Ι	R	Μ	
			Define a word processing program and describe its applications
			Define word processing terminology and demonstrate related skills
			List the steps involved in creating a document with word
			processing
			Save a word processing file
			Add an existing word processing file to memory
			Create an original document
			Move the cursor around the screen easily as needed
			Insert text
			Delete words, characters, and text
			Produce a printed copy of a document
			Add multiple files from disk to memory
			Use commands to boldface and underline words
			Center headings
			Use justification commands
			Recognize and use proofreading marks
			Use spell check program

FLOWCHARTS

R	Μ	
		Understand the purpose of a flowchart
		Read and draw a simple flowchart
		Write steps in logical sequence
		Identify errors and unneeded steps
		Understand the symbolism of, identify, and draw an oval,
		rectangle, and arrow
		Identify and use the decision symbol
		Create a flow chart and write a logical sequence of steps needed to
		perform a task within a computer program
		Recognize and correct the errors in a flowchart
		Identify and use the input/output symbol
		Understand and apply GOTO statements in a flowchart
		Understand and apply IF/THEN statements in a flowchart
		Understand and apply FOR/NEXT statements in a flowchart
	R	R M

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO SIXTH GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements
			and the impact of automation on the job market
			Define computer ethics and the purpose of ethical standards
			Explain unethical use of computers, including illegal copying of
			hardware and software, and as in relation to an individual's privacy
			rights
			Describe security measures for preventing computer misuse
			Define artificial intelligence and explain the difficulties involved,
			the by-products, and the applications
			Classify types of computers such as PCs, mainframes, and micro-
			computers, and the advantages for their applications in various settings
			Understand the uses, limitations, and attributes (i.e., speed, accuracy, color, sound) that make computers appropriate tools in a
			variety of situations

COMPUTER USAGE

Ι	R	Μ	
			Demonstrate proper handling and care of hardware Demonstrate proper care and use of a diskette
			Access and use various types of educational software independently
<u> </u>			Review and evaluate software

KEYBOARDING SKILLS

I R M

Ι

- _____ Use appropriate posture at the keyboard
- R
 M

 Type sentences and short paragraphs from written material
- _ ____ Type an entire page of text with minimal errors
- Type for improved accuracy
- _____ Type for improved speed

WORD PROCESSING

Ι	R	Μ	
			Define a word processing program and describe its applications
			Define word processing terminology and demonstrate related skills
			List the steps involved in creating a document with word
			processing
			Save a word processing file
			Add an existing word processing file to memory
			Create an original document
			Move the cursor around the screen easily as needed
			Insert text
			Delete words, characters, and text
			Produce a printed copy of a document
			Add multiple files from disk to memory
			Use commands to boldface and underline words
			Center headings
			Use justification commands
			Recognize the application of word processing by producing a
			document in another content area
			Recognize and use proofreading marks
			Use spell check program

FLOWCHARTS

Ι	R	Μ	
			Understand the purpose of a flowchart
			Read and draw a simple flowchart
			Write steps in logical sequence
			Identify errors and unneeded steps
			Understand the symbolism of, identify, and draw an oval,
			rectangle, and arrow
			Identify and use the decision symbol
			Create a flow chart and write a logical sequence of steps needed to
			perform a task within a computer program
			Recognize and correct the errors in a flowchart

			Identify and use the input/output symbol
			Use flowchart steps involving more than one decision
			Understand and apply GOTO statements in a flowchart
			Understand and apply IF/THEN statements in a flowchart
Ι	R	Μ	
			Understand and apply FOR/NEXT statements in a flowchart

MULTIMEDIA USAGE

Ι	R	Μ	
			Use technology tools (e.g. multimedia authoring, presentation, digital cameras, scanners) for individual and collaborative writing, communication and publishing activities.
			Insert and arrange graphics and clip art.

INTERNET USAGE

Ι	R	Μ	
			Use the Internet to locate, collect and evaluate information.
			Use online resources to participate in collaborative problem- solving activities.
			Use the Internet to interact with peers, experts, and other resources.

BASIC*

Ι	R	М	
			Define BASIC terminology and demonstrate related skills
			Define BASIC as one computer language
			Understand the importance and use of line numbers in a program
			Use PRINT statements to print numbers, words, mathematical
			expressions, and blank lines
			Read through a simple sample program
			Write a simple program
			Demonstrate ability to label programs with REM statements
			Demonstrate ability to list programs and section of programs to
			printer
			Understand and demonstrate the use of quotation marks in a
			program
			Understand and demonstrate the use of commas, colons, question
			marks, and semi-colons in a program
			Understand and demonstrate the use of variables in a program
			Run a hard copy of program output
			Differentiate between string and numerical variables
			Demonstrate the ability to choose a logical sequence of steps to
			perform a task
			Correlate flowcharting with programming

 	 Write and test a program to solve a specified problem
 	 Predict the outcome of a given program
 	 Use GOTO statements as infinite loops (*)
 	 Find and edit (debug) errors in student-made or given program (*)
 	 Use GOTO statements for program direction
 	 Use IF/THEN statements (*)
 	 Use mathematical symbols for equality and inequality (*)
 	 Use FOR/NEXT statements as counters, nested loops, finite loops, and infinite loops (*)
 	 Write a simple subroutine using GOSUB and RETURN (*) Generate random numbers for READ/DATA statements (*)

(*) = Optional

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO SEVENTH GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements and the impact of automation on the job market
			Define computer ethics and the purpose of ethical standards
			Explain unethical use of computers, including illegal copying of
			hardware and software, and as in relation to an individual's privacy rights
			Describe security measures for preventing computer misuse
			Define artificial intelligence and explain the difficulties involved,
			the by-products, and the applications
			Classify types of computers such as PCs, mainframes, and micro- computers, and the advantages for their applications in various
			settings
			Understand the uses, limitations, and attributes (i.e., speed, accuracy, color, sound) that make computers appropriate tools in a
			variety of situations
			Understand the meaning of virus as it relates to computer technology

COMPUTER USAGE

Ι	R	Μ	
			Demonstrate proper handling and care of hardware
			Demonstrate proper care and use of a diskette
			Access and use various types of educational software
			independently

_____ Review and evaluate software

KEYBOARDING SKILLS

- I R M
 - _____ Use appropriate posture at the keyboard
 - _____ Type for improved accuracy
 - _ ____ Type for improved speed

WORD PROCESSING

Ι	R	Μ	
			Define a word processing program and describe its applications
			Define word processing terminology and demonstrate related skills
			List the steps involved in creating a document with word
			processing
			Save a word processing file
			~
			~
			Add multiple files from disk to memory
			Use printing option to format a document
			Use commands to boldface and underline words
			Set margins
			~
			document in another content area
			Recognize and use proofreading marks
			Use spell check program

DATA BASE

Ι	R	Μ	
1 	K 		Define a data base and describe its applications Define data base terminology and demonstrate related skills Load a data base program to memory Create a file and assign field attributes
			Edit data base entries

	 	Save data base
I	 	Search and sort records for a data base for a specific need
 	 	Delete records from a data base file Add new fields to an existing data base Print data base reports Print using the label and/or table format Create data base reports integrated into curriculum subject areas Demonstrate ease moving within data base

MULTIMEDIA USAGE

- I R M
 - Use technology tools (e.g. multimedia authoring, presentation, digital cameras, scanners) for individual and collaborative writing, communication and publishing activities.
 Insert and arrange graphics and clip art.

INTERNET USAGE

Ι	R	Μ	
			Use the Internet to locate, collect and evaluate information.
			Use online resources to participate in collaborative problem- solving activities.
			solving derivities.
			Use the Internet to interact with peers, experts, and other resources.

BASIC*

Ι	R	Μ	
			Define BASIC terminology and demonstrate related skills (*)
			Define BASIC as one computer language (*)
			Understand the importance and use of line numbers in a
			program(*)
			Use PRINT statements to print numbers, words, mathematical
			expressions, and blank lines (*)
			Read through a simple sample program (*)
			Write a simple program (*)
			Demonstrate ability to label programs with REM statements (*)
			Demonstrate ability to list programs and section of programs to
			printer (*)
			Understand and demonstrate the use of quotation marks in a
			program (*)
			Understand and demonstrate the use of commas, colons, question
			marks, and semi-colons in a program (*)
			Understand and demonstrate the use of variables in a program (*)
			Run a hard copy of program output (*)

 	 Differentiate between string and numerical variables (*)
 	 Demonstrate the ability to choose a logical sequence of steps to
	perform a task (*)
 	 Correlate flowcharting with programming (*)
 	 Write and test a program to solve a specified problem (*)
 	 Predict the outcome of a given program (*)

(*) = Optional

SPREADSHEET

Ι	R	Μ	
			Define a spreadsheet and describe its applications
			Define spreadsheet terminology and demonstrate related skills
			Load a spreadsheet
			Move the cursor easily along rows and columns
			Use a specific command to GOTO a particular cell
			Enter and change values and labels
Ι	R	Μ	
			Use function commands to perform operations on rows and
			columns
			Insert into or delete from two columns and/or rows into an existing
			spreadsheet.
			Format labels for a block of cells
			Copy the contents of one cell to another, one column to another,
			one formula to another cell.
			Change the cell widths of an existing spreadsheet
			Align column right, left, or centered
			Change number style according to needs (general, percent, dollar,
			or exponential)
			Use the locking-cell function
			Use a spreadsheet for a specific purpose, such as computing grade
			averages
			Recognize the application of spreadsheets by producing a
			document in another content area

GRADE LEVEL SUBJECT AREA EXPECTATIONS DIOCESE OF FRESNO EIGHTH GRADE

EXPECTATIONS FOR RELIGIOUS INTEGRATION AND ARTICULATION

- _____ A. Promote ethical values pertaining to the use of the computer.
- _____ B. Stimulate student potential for creativity.
- _____ C. Reinforce and maintain computer ethics, morals and standards.
- _____ D. Understand the cultural, and societal issues related to technology.
- E. Practice responsible use of technology systems, information and software.
- F. Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

ACADEMIC GRADE LEVEL SUBJECT AREA EXPECTATIONS

COMPUTERS IN SOCIETY – HISTORY AND ETHICS

Ι	R	Μ	
			List uses of computers in a variety of situations
			Identify computer related careers, including training requirements
			and the impact of automation on the job market
			Define computer ethics and the purpose of ethical standards
			Explain unethical use of computers, including illegal copying of
			hardware and software, and as in relation to an individual's privacy
			rights
			Describe security measures for preventing computer misuse
			Define artificial intelligence and explain the difficulties involved,
			the by-products, and the applications
			Classify types of computers such as PCs, mainframes, and micro-
			computers, and the advantages for their applications in various
			settings
			Understand the uses, limitations, and attributes (i.e., speed,
			accuracy, color, sound) that make computers appropriate tools in a
			variety of situations
			Understand the meaning of virus as it relates to computer
			technology
			Describe the methods people used to perform calculations and
			keep records prior to the use of mechanical devices
			Describe the development of mechanical calculating devices
			Describe how electro-mechanical calculating devices led to the
			development of first generation computers
			Identify the chief characteristics of each of the four computer
			generations
			Predict the changes for the fifth generation computers

COMPUTER USAGE

Ι	R	М	
			Demonstrate proper handling and care of hardware Demonstrate proper care and use of a diskette
			Access and use various types of educational software independently
			Review and evaluate software

KEYBOARDING SKILLS

I R M _____ Use appropriate posture at the keyboard _____ Type for improved accuracy _____ Type for improved speed

WORD PROCESSING

Ι	R	Μ	
			Define a word processing program and describe its applications
			Define word processing terminology and demonstrate related skills
			List the steps involved in creating a document with word
			processing
			Save a word processing file
			Add an existing word processing file to memory
			Create an original document
			Move the cursor around the screen easily as needed
			Insert text
			Delete words, characters, and text
			Copy and move blocks of text
			Use commands to create new page breaks
			Add multiple files from disk to memory
			Reset TAB stops in a document
			Use commands to boldface and underline words
			Set margins
			Center headings
			Use justification commands
			Recognize the application of word processing by producing a
			document in another content area
			Recognize and use proofreading marks
			Use spell check program

DATA BASE

Ι	R	Μ	
			Define a data base and describe its applications
			Define data base terminology and demonstrate related skills
			Load a data base program to memory
			Create a file and assign field attributes
			Edit data base entries
			Save data base
			Search and sort records for a data base for a specific need
			Delete records from a data base file
			Add new fields to an existing data base
			Print data base reports
			Print using the label and/or table format
			Create data base reports integrated into curriculum subject areas
			Demonstrate ease moving within data base

MULTIMEDIA USAGE

Ι	R	Μ	
			Use technology tools (e.g. multimedia authoring, presentation, digital cameras, scanners) for individual and collaborative writing, communication and publishing activities.
			Insert and arrange graphics and clip art.

INTERNET USAGE

Ι	R	Μ	
			Use the Internet to locate, collect and evaluate information.
			Use online resources to participate in collaborative problem- solving activities.
			Use the Internet to interact with peers, experts, and other resources.

BASIC*

Ι	R	Μ	
			Define BASIC terminology and demonstrate related skills (*)
			Define BASIC as one computer language (*)
			Understand the importance and use of line numbers in a
			program(*)
			Use PRINT statements to print numbers, words, mathematical
			expressions, and blank lines (*)
			Read through a simple sample program (*)
			Write a simple program (*)
			Demonstrate ability to label programs with REM statements (*)

 	 Demonstrate ability to list programs and section of programs to printer (*)
 	 Understand and demonstrate the use of quotation marks in a program (*)
 	 Understand and demonstrate the use of commas, colons, question marks, and semi-colons in a program (*)
 	 Understand and demonstrate the use of variables in a program (*)
 	 Run a hard copy of program output (*)
 	 Differentiate between string and numerical variables (*)
 	 Demonstrate the ability to choose a logical sequence of steps to perform a task (*)
 	 Correlate flowcharting with programming (*)
 	 Write and test a program to solve a specified problem (*)
 	 Predict the outcome of a given program (*)

(*) = Optional

GRAPHICS/BASIC

Ι	R	Μ	
			Define graphics terminology and demonstrate related skills (*)
			Write and design a plot program for specific output with geometric
			shapes using a grid (*)
			Identify the plot coordinates of specific single square (*)
			Predict graphic output of horizontal lines, vertical lines, and plot
			programs (*)
			Construct diagonal lines using FOR/NEXT loops (*)
			Construct letter/number characters (*)
			Create an original graphic, using various colors and shapes (*)

(*) = Optional

GRAPHICS/OTHER

Μ

Ι	R

Create, edit, print and save using graphics software if available (*)

(*) = Optional

SPREADSHEET

Ι	R	М	
			Define a spreadsheet and describe its applications
			Define spreadsheet terminology and demonstrate related skills
			Load a spreadsheet
			Move the cursor easily along rows and columns
			Use a specific command to GOTO a particular cell

			Enter and change values and labels Use function commands to perform operations on rows and
			columns
			Insert into or delete from two columns and/or rows into an existing spreadsheet.
			Format labels for a block of cells
			Copy the contents of one cell to another, one column to another, one formula to another cell.
			Change the cell widths of an existing spreadsheet
			Align column right, left, or centered
			Change number style according to needs (general, percent, dollar, or exponential)
			Use the locking-cell function
			Use a spreadsheet for a specific purpose, such as computing grade averages
Ι	R	М	
			Recognize the application of spreadsheets by producing a
			document in another content area