Computer Literacy

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Week 1

Introduction to Computers

Lesson 1

Find these words in the Glossary and write their definitions.

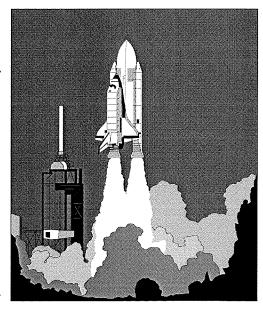
computer literacy	
scenario	20

Read the following text for good understanding.

The space shuttle sits ready on its launch pad. Bright lights shine on its gleaming white surface, creating a breathtakingly beautiful sight against the azure sky. A large crowd has gathered along the coastline, across the river from the launch pad at Cape Canaveral. They are growing tense, because the countdown is nearing zero.

In the launch control center, hundreds of workers are watching monitors, television screens, numeric displays, and radar panels. Many of them are wearing headsets, staying in constant communication. The meteorologist gives the "all clear." He had been watching a line of thunderstorms traveling toward the Cape, but the squalls have turned easterly and bypassed the launch zone outside the danger perimeter. The technicians who have been monitoring the shuttle's many systems have given the launch "thumbs up." Flight command, in Houston, Texas, has indicated that communications are fine. The entire flight team agrees: this launch is a "Go!"

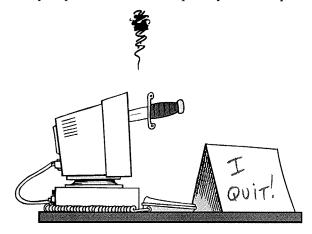
Ten-nine-eight...the crowd along the riverbank takes up the chant...seven-six-five...scores of engineers are watching their monitors...four-three-two-one...Blastoff! Flames erupt from the shuttle's engines, and a shudder is felt in the ground. A huge orange fireball fills the field of



vision of everyone watching on the shore. Then the shuttle begins to rise. By the time it has cleared the top of the launch platform, the shuttle is traveling more than one hundred miles per hour!

A cheer goes up from the watching crowd. Such excitement! Such beauty! And the shuttle goes speeding into an orbit toward the waiting space station. Within a few minutes, it has traveled a thousand miles. How is this possible? How can such an incredibly complicated piece of machinery exist? And fly safely and reliably? Only through the use of computers.

But this is not the only use of computers. No, no, far from it. In fact, you have many in your home. Even if you do not have a personal computer, you have a radio, or a stove, or a washing machine, or an alarm clock, or even a digital watch that is controlled by a computer. Our entire society is permeated and helped by the computer.



Not everybody wants to use a computer!

Some people take a dim view of computers. They believe that most of society's problems can be traced back to them. They make jokes such as, "To err is human, to really foul things up takes a computer." But computers have really made the world a lot easier, not to mention safer, for everybody.

A few years ago, a watch that would keep good time was a very expensive commodity. If you wanted a watch that kept nearly perfect time, you would have to spend several hundreds of dollars for it—perhaps even thousands. Now you can buy a digital watch that keeps even better time for about five dollars.

Computer systems monitor the air quality in mines. They provide information about a car and allow it to make adjustments to improve gas mileage, brake control, and emission quality. Computers provide security for many homes. They provide reliable telephone communications. They lower the cost of manufacturing goods. They even help you get your order quicker at a fast food restaurant!

Computers have come into common use in offices, in homes, in schools, in manufacturing concerns, and even in gasoline stations. People have become accustomed to using computers to pay bills, to communicate with friends and business associates, and to write books or courses.

It is hard to believe that one machine—and that is what a computer is—could impact a society in so many ways. Not since the invention of the wheel or the steel plow has a machine had such a tremendous and far-reaching impact on everyday life. In any one day, each of us depends upon computers in hundreds of ways. It is incredible to think how dependent we have become on a machine that was invented less than one hundred years ago! And it has led to a rapid change in the way business, industry, and even education operate.

If the computer has such an important role to play in our lives, it just makes good sense for us to learn something about them. Of course, not everyone has to become a computer programmer or data entry operator. But the more you know about them, the more you will benefit from them. If the computer is here to stay—and it is—we must learn how to use it. And like everything else the Lord has given us, we must learn to use it for His glory. We can use the computer as a tool to help us in the work of evangelism, and because it brings the world a little closer, we can actually use it to reach the whole world!

Introduction to Computers Week 1

Fill in the blanks.

1.	Our society is permeated and	by the use of computers.	
2.	Computer systems monitor the air	in mines.	
3.	Computers help a car to have better	mileage.	
4.	Computers provide reliable	communications.	
5.	A computer is actually a	·	
6.	We must learn to use computers to help us in	the work of	

Lesson Two

What does it mean to be computer literate?

Read the following text for good understanding.

Literacy involves the ability to know and to use some particular area of knowledge and skill. For instance, if we just say "literacy," and we don't put any other descriptive words in front of it, we assume that we are talking about reading skill. In this case, literacy means that we know the alphabet, that we know the sounds each letter makes, that we are able to recognize words and their meanings, and that we are able to understand the meaning of groups of words strung together. That is reading, and that is literacy.

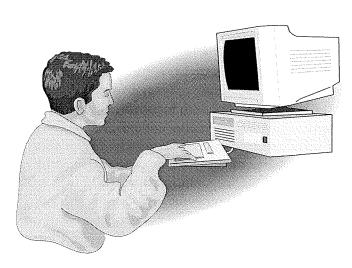
Computer literacy, then, is an understanding of computers that allows us to function with them. To know about them, but not be able to use them, is not enough. What we must strive for is an understanding of their use and the ability to use them.

This literacy breaks down into several parts:

- 1. Understanding the history of computing.
- 2. Understanding computer hardware.
- 3. Understanding the uses, or roles, of the computer.
- 4. Understanding how to use a personal computer.
- 5. Understanding software applications—their uses and how to make them work for you.

In this course, we will take a closer look at each of these areas of computer literacy. We will talk about their importance and why they should be *important to you*. You may find one of these areas more interesting than others, but pay good attention all the time. Remember, our ultimate goal is the successful use of the computer. The more you know about the overall subject, the easier it will be for you to understand and master particular applications.

You may, for instance, only want to learn to write on the computer. If you are going to succeed and become efficient at this task, you are going to have to learn about computer hardware. Otherwise, you will waste time and become frustrated at your computer system.



Determine that you will do your very best as you proceed from one area to another. You may say, "I wish I could just use the computer and not have to read all this text." But the text is there for a purpose. The text will explain what you need to know in order to get the most benefit out of the assignments. Or you might be on the other end of the spectrum. You might say, "I wish I could just read the text and answer the questions and not have to do these assignments on the computer." But the assignments are the key to learning to use the computer. You need both: the text and the hands-on computer work. So do your best all the time!

Answer these questions.

What are the five main areas of computer literacy?

C	
)	
 goal in learning about co	

Lesson Three

Computers — Making Hard Tasks Easier

Read the following text for good understanding.

We could ask the question, "Why computers, anyway?" A lot of people actually feel this way about computers. They do not understand them, so they think they are not important. "I liked the good old days before computers better." What they really mean is that they do not understand computers and are just a little bit afraid of them. "Computers create as much work as they save." Not true. It might seem that way to people who have never learned to use one, but it is simply not true.

Let's look at some examples to show how computers have saved an enormous amount of time and work in the workplace.

Word Processing

An author sits down to write a 2,000 word article. He has already completed his research and has a working outline. He works at the typewriter, fleshing out his ideas. As he works, he writes a paragraph, then decides it is in the wrong place. He circles it and draws an arrow to the location where it should be. He continues writing. He makes several mistakes in his typing, and misspells several words. But he continues. Finally, he has typed his article. It is 2,450 words long, which works out to eight pages of typing.

The author then sits down with a red pen to edit his article. He rewrites part of the misplaced paragraph so that it transitions smoothly from the material immediately before and after it. He reads through the document and marks it up, correcting his spelling and typing errors. He marks grammatical errors and fixes them. By the time he finishes his editing, the document is about half black and about half red. Good job!

Now, he sits back down at the typewriter and retypes his article. If he is a good typist, he will be finished in two hours. Now he evaluates his work again. But he has discovered that one of his points in the article just doesn't sound right. It will need to be rewritten. And he just really isn't satisfied with that troublesome paragraph. So he gets the red pen and starts to work. He decides to eliminate the bad paragraph and write the information it contained into the following paragraph. It's not really a difficult task, so he finishes it in just a few minutes. Then he rewrites the weak point. He writes his replacement text on the back of a couple of the newly retyped pages. Then he proofs the entire document again, and marks up several other paragraphs, striving for excellence in his work. He is now satisfied with the article.

Back to the typewriter. Again, he retypes the article in about two hours. Now he reads through his new article, looking for any errors that he might have made. He discovers that he has made two typos in his new section. So he retypes that page.

Let's look at the time he has spent on the article:

Initial writing: 4 hours Editing: 2 hours Retyping: 2 hours

VSGX741

9

Editing: 1 hour
Retyping: 2 hours
Final proof: 1 hour
Final corrections: 1/2 hour

Total manuscript preparation time: 12 1/2 hours

Now let's look at the same **scenario** on the computer using word processor software. The author sits down to write his manuscript on the word processor. While he is working, he discovers that he has put a paragraph in the wrong place. He highlights the paragraph, copies it to the word processor's clipboard (one keystroke!) and then pastes it into the correct position within the document. He continues writing. As he does, he makes several typos and spelling errors. The computer marks these for him with a red underline.



When he has completed his article, he corrects his spelling. Then he prints out his eight page document for editing. He marks up the manuscript, correcting his grammatical errors (the computer will help him with this if he chooses), and thinking of better ways to phrase some ideas (the computer will help him with this, too, if he wants!).

When he is finished marking up his document, he sits back down at the word processor. He makes his corrections. Then he prints the document and reads it again. He is not satisfied with the placement of that stubborn paragraph, and he doesn't feel right about the weak point. So he sits back down at the word processor

and deletes the paragraph from the document. Then he inserts the information into the following paragraph. He corrects his work on the weak point. Then he prints his manuscript again. He reviews the document and finds that it is finished.

Here is the time that he has spent on the article:

Initial writing:

Editing:

Retyping:

Editing:

Editing:

15 minutes

Editing:

1 hour

Retyping:

15 minutes

Final proof:

15 minutes

Final corrections:

5 minutes

Total manuscript preparation time: 7 hours, 50 minutes

On just this one article, the author saved more than 4 hours because he was using a word processor. Now, suppose he had written a 100,000 word book instead of an article. How much time would he have saved? You can see that he would save an enormous amount of time!

An added bonus is that he can send the document to his publisher in an electronic form. The article will never have to be typed again. It can be typeset directly from his file!

Introduction to Computers Week 1

This is just one example of many which could be given. Travel agents would never go back to looking through printed schedules and making out handwritten tickets. Mail rooms would never go back to the days when they had to type mailing labels by hand for each mailing. Today, they can simply print out a customized list onto pre-pasted labels! Telephone systems have automatic switching and can connect millions of calls a day. Can you imagine how difficult (if not impossible) it would be today to support our telephone traffic by manually plugging little jacks into little holes?

No, it's not true that computers cause as much work as they save. They have made many tasks much easier. You will see even more evidence of the improved efficiency computers offer as we continue through this course and learn more about the uses of computers.

Write a paragraph describing one task which has become more efficient through the use of computers. You might use one of these as a starting idea:

- Car repair
- Research
- Mathematics
- · Maintaining an address book
- Graphic arts
- · Publishing
- Records keeping
- Flying and navigation
- Communications (radio, telephone, etc.)

Lesson Four

Write a report explaining why you want to take this course. Explain your reasons for wanting to become literate in the use of computers.			s for		
				Marine Marine III.	

11

Week 1	Introduction to Computers
	it to your Teacher/Parent. Have your Teacher/Parent
ign below.	
	~0,
Teacher/	Parent Signature
Teacher/1	urem signature
5	
	Lesson Five
Гаке Weekly Quiz #1.	
Гаке Weekly Quiz #1.	
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Computer Literacy Studyguide Answers

Week 1

Lesson 1

Glossary

- 1. the ability to perform a skill
- 2. the ability to understand the functions and uses of a computer
- 3. a given set of circumstances

Fill in the blanks.

- 1. helped
- 2. quality
- 3. gas
- 4. telephone
- 5. machine
- 6. evangelism

Lesson 2

- 1. Understanding the history of computing.
- 2. Understanding computer hardware.
- 3. Understanding the uses, or roles, of the computer.
- 4. Understanding how to use a personal computer.
- 5. Understanding software applications.
- 6. Our ultimate goal is the successful use of the computer.

Lesson 3

Teacher/Parent Evaluation

Lesson 4

Teacher/Parent Evaluation

Ecclesiastes 9:10a: "Whatsoever thy hand findeth to do, do it with thy might;"

3

VOTX741 COMPUTER LITERACY QUIZ #1

Is a I	a Part of V741Complete Subject Set	Name
Fill i	ll in the blanks.	
1.	Our society is permeated and helped by the	use of
2.	Computers help a car to have better	mileage.
3.	A computer is actually a	·
4.	Computers can help us in the work of	
Ans	nswer these questions.	
Wha	hat are the five main areas of computer litera	cy?
6.		
7.		000
8.		
9.		
10.		

VWQA741 COMPUTER LITERACY WEEKLY QUIZ ANSWERS #1

Is a Part of V741 Complete Subject Set

- 1. computers
- 2. gas
- 3. machine
- 4. evangelism
- 5. Understanding the history of computing.
- 6. Understanding computer hardware.
- 7. Understanding the uses, or roles, of the computer.
- 8. Understanding how to use a personal computer.
- 9. Understanding software applications.
- 10. Our ultimate goal is the successful use of the computer.
- 11. Ecclesiastes 9:10a: "Whatsoever thy hand findeth to do, do it with thy might;"

VWQA741 COMPUTER LITERACY WEEKLY QUIZ ANSWERS #2

Is a Part of V741 Complete Subject Set

- 1. D
- 2. B
- 3. C
- 4. A
- 5-8. Student answer

Any three of the following for 9-11. patience programming adjusts to student performance keeping track of student's progress computers are fun

- 12. records keeping
- 13. correspondence
- 14. music
- 15. Ephesians 5:16: "Redeeming the time, because the days are evil."

VWQA741 COMPUTER LITERACY WEEKLY QUIZ ANSWERS #3

Is a Part of V741 Complete Subject Set

These definitions are to be in the student's own words, but here are the Glossary definitions to help you score.

Is a Part of V741 Complete Subject Set

Name	

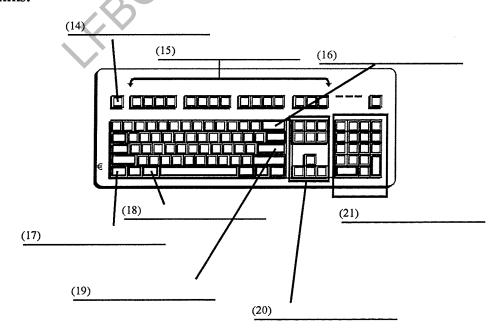
Match the words with their definitions.

	1.	mainframe
	2.	internet
	3.	data
<u> </u>	4.	program
	5.	input
	6.	output
	7.	binary system
4-4	8.	interface
to the contract of the contrac	9.	transistor
	10.	integrated circuit
	11.	peripheral
	12.	modem

- A. a large, fast, complex computer system
- B. raw information
- C. a number system based on the two digits 0 and 1
- D. the point of contact between two items or entities; the joining point
- E. a device which is not a core component of a computer, but which allows for input or output
- F. a device that does the work of many transistors
- G. data that is received from the computer
- H. a set of instructions
- I. an electronic device that modifies electrical impulses
- J. a device for sending electronic signals over telephone wires
- K. an area designed by a logical plan
- L. data that is entered into the computer
- M. the worldwide collection of computers which are able to communicate with each other through wired connections

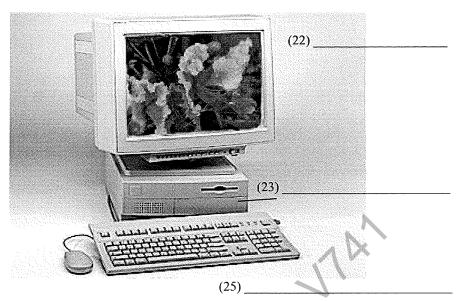
Fill in the blanks.

13. sector



Is a Part of V741 Complete Subject Set

Name



(24)

Answer these questions.

26.	what is a working definition of a personal computer?	
	60)	
What	are the five main areas of computer literacy?	
27.		
28.		
29.		
30.		
31.		
32.	What is a GUI and what is its primary purpose?	
33.	What was the first practical adding machine?	
What	invention led to these generations of computers?	
34.	First generation	
35.	Second generation	

VQTX741 COMPUTER LITERACY QUARTER TEST #1

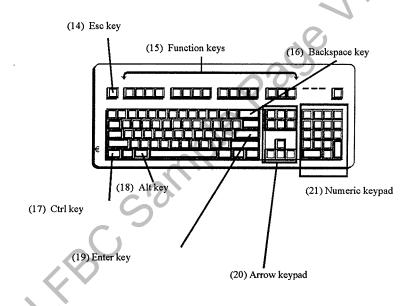
Page 3

Is a Par	rt of V741 Complete Subject Set	Name
36.	Third generation	
37.	Fourth generation	
Write	these verses.	
38.	Ecclesiastes 9:10a	
		N. C.
39.	Ephesians 5:16	
		20
40.	Proverbs 8:11	
	60	

VQTA741 COMPUTER LITERACY QUARTER TEST ANSWERS #1

Is a Part V741 Complete Subject Set

- 1. A
- 2. M
- 3. B
- 4. H
- 5. L
- 6. G
- 7. C
- 8. D
- 9. I
- 10. F
- 11. E
- 12. J
- 13. K



- 22. monitor
- 23. system unit
- 24. mouse
- 25. keyboard
- 26. A personal computer is a computer designed for one person at one desk.
- 27. Understanding the history of computing.
- 28. Understanding computer hardware.
- 29. Understanding the uses, or roles, of the computer.
- 30. Understanding how to use a personal computer.
- 31. Understanding software applications.
- 32. A GUI is a graphical user interface and its primary purpose is to help the operator learn and use the computer faster.

- 33. abacus
- 34. electronic tube
- 35. transistor
- 36. integrated circuit
- 37. microprocessor
- 38. Ecclesiastes 9:10a: "Whatsoever thy hand findeth to do, do it with thy might;"
- 39. Ephesians 5:16: "Redeeming the time, because the days are evil."
- 40. Proverbs 8:11: "For wisdom is better than rubies; and all the things that may be desired are not to be compared to it."

VQTA741 COMPUTER LITERACY QUARTER TEST ANSWERS #2

Is a Part V741 Complete Subject Set

- 1. operating systems
- 2. programming languages
- 3. applications

Any of these for 4-6:

COBOL, PASCAL, C, BASIC, LOGO

Any of these for 7-12:

database

spreadsheets

accounting software

word processing

graphics creation

communications

educational software

utilities

games

reference works

real world applications

- 13. Spreadsheets and databases hold data in tables.
- 14. Find
- 15. Sort
- 16. A report is used to print out information in a database.
- 17. A field is a column in the table consisting of similar data.
- 18. A record is one row in the table consisting of all the data related to one item.
- 19. A data entry form allows for easy entering of information, or data, one record at a time.
- 20. A wildcard is a character such as * or ? that can stand for an unknown character or group of characters. It is used in a search to represent unknown data.
- 21. text
- 22. numbers
- 23. functions
- 24. A logical operator is an expression such as IF, AND, OR, or NOR.
- 25. A relational operator is an expression such as =, <, or >.