

COMPUTERS MERIT BADGE

WORKSHEET

BYU/UVU
Merit Badge Pow Wow

Scout's Name _____ Instructor's Name _____

Scout's Address _____ City _____ State _____ ZIP _____

Instructions

1. The Scout is to review the merit badge book **BEFORE** the first Saturday of the Pow Wow.
2. A **merit badge pamphlet/book** is a **MUST** for this merit badge and must be read before coming to the pow wow. It is **impossible** to get through this merit badge without the merit badge pamphlet/book.
3. The Scout is to bring this **worksheet, paper, and pencil EACH WEEK.**

Requirement Instructions

First Week

A lecture covering **ALL REQUIREMENTS** and **PASS OFF PROCEDURES** for this merit badge will be discussed during the first week. The scout needs to come prepared to take notes on his worksheet in preparation for passing off each requirement. Homework assignments will be assigned and are expected to be completed during the two week period between the first and second week of the pow wow.

Second Week

The second week will be used for working on specific requirements that can be completed at the pow wow, along with the passing off of the merit badge.

Requirement 1

Initials

EXPLAIN tips for online safety.

Requirement 2

Initials

EXPLAIN how the invention of the computer has affected society, science, and technology.

USING a separate sheet of paper or the backside of this sheet, in your own words, give a brief detailed history of computers
(This requirement may be worked on before the Pow Wow begins the 1st Week.)

Requirement 3

Initials

A. Explain **four (4)** different uses of computers

1. _____
2. _____

Requirement 3 (cont.)

- 3. _____
- 4. _____

B. **DESCRIBE THREE WAYS** that you and your family can use a personal computer other than for games and recreation.

- Use: _____
- Use: _____
- Use: _____

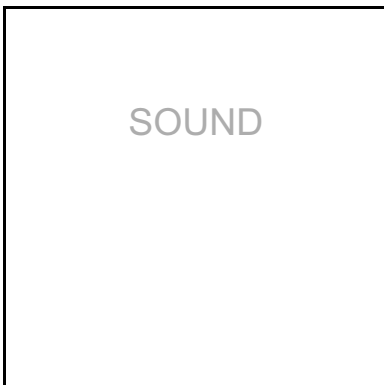
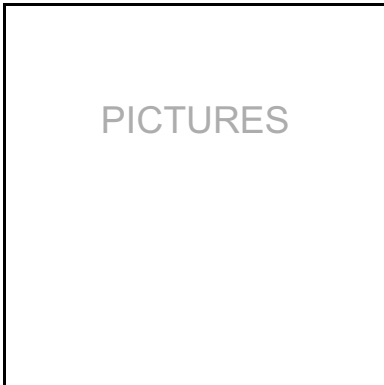
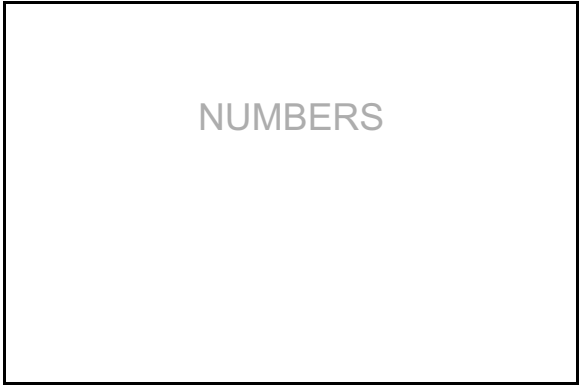
Requirement 4

Initials

A. **NAME** the major parts of a computer system, and **DESCRIBE** the main function of each.

- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____
- Part Name: _____ Main Function: _____

A. In the following areas **SHOW** how **text**, **numbers**, **pictures**, and **sound** may be stored:



Requirement 5

Initials

A. **DESCRIBE** what a program is.

HOW is a program developed?

B. **LIST THREE (3) EXAMPLES** of **PROGRAMMING LANGUAGES** and what types of programming they are used for.

Programming Language: _____

What is the programming language used for? _____

Programming Language: _____

What is the programming language used for? _____

Programming Language: _____

What is the programming language used for? _____

B. Name **FOUR** software packages and describe or explain how you or your family would use them.

Software Package: _____

How would you use it? _____

Software Package: _____

How would you use it? _____

Software Package: _____

How would you use it? _____

Software Package: _____

How would you use it? _____

Requirement 5 cont.

D. **DESCRIBE** ways you can protect a computer from viruses. _____

DESCRIBE how to keep secure information that has been saved on a computer. _____

E. **DESCRIBE HOW** computers are linked to form the Internet and the World Wide Web. _____

Initials

Requirement 6

You have been given **EIGHT** options for this requirement. **SELECT** and **COMPLETE THREE** of them. When you have completed them, **SHOW** or **DEMONSTRATE** them to your counselor. Print off your projects and attach the papers to this worksheet. At least one of the **THREE** projects needs to be completed during the two sessions of the pow wow.

- Option 1:** USE a **DATABASE MANAGER** to create a **troop roster**, providing name, rank, patrol, and telephone number of each Scout. Sort the register by rank, by patrol, and alphabetically by name.
- Option 2:** USE a **SPREADSHEET PROGRAM** to develop a **weekend campout food budget** for your patrol.
- Option 3:** Use a **WORD PROCESSOR** to **WRITE** a **LETTER** to parents of your troop's Scouts inviting them to a **COURT OF HONOR**. Use the program's **MAIL MERGE FEATURE** to make a personalized copy of the letter for each family.
- Option 4:** Use a **COMPUTER GRAPHICS** program to design and **DRAW A CAMPSITE** plan for your troop, OR, design a flyer for an upcoming troop event.
- Option 5:** Using a software package of your choice, develop a **SHORT PRESENTATION** about a topic that **has been approved by your counselor**. For your presentation create a least 10 slide, slide presentation that will be shared in class. **Your presentation MUST have 10 or more slides in it.**
- Option 6:** Find ideas about how to conduct a **TROOP COURT OF HONOR** or **CAMPFIRE PROGRAM** using an Internet search engine. **PRINT OUT A COPY** of the ideas from at least **THREE** different **Website's** and attach the papers to this worksheet. **This option may be completed prior to the 1st week of the Pow Wow.**

Option 7: Using a **DIGITAL CAMERA**, take a **PICTURE** of a **TROOP ACTIVITY**. **Transfer** the picture file to a computer and use photographic software to make it small enough to send easily as an email attachment. Then using a computer connected to the Internet, **send** an email to your merit badge instructor/counselor explaining the picture and the event it was taken at. You must also **identify** all participants showed. In your message **include** the photograph as an attachment. **Verify** that the person received your email and was able to view the attachment. **You may begin working on this option prior to the 1st week of the Pow Wow.**

Option 8: Using the back of this worksheet or on a separate piece of paper, **DESCRIBE TWO COMPUTER CHIP-BASED DEVICES**, and explain how they are **'smarter'** because of the chip and its program. **You may begin working on this option prior to the 1st week of the Pow Wow.**

Requirement 7

Initials

You have been given **FOUR OPTIONS** for this requirement. Select and complete **ONE** of them.

Option 1 - Visit a business or industry that uses computers and fill in the blanks below:

What business did you visit? _____
What does the computer accomplish at this business or in this industry? _____

Option 2 - **After receiving you counselor's approval**, use a software package of your choice to create a computer-aided design (CAD) drawing of a simple object. Include the **top**, **bottom**, and at least **one side view** and the **dimensions**.

What software package did you use? _____
Where did you complete your project? _____
Did you work alone or did you require someone to assist or coach you, (Be Honest!) _____
Who (if anyone) assisted or coached you? _____

Option 3 - **USE a general-purpose programming language** to write a program application of your choice.

What programming language did you use? _____
DESCRIBE the program you wrote and its purpose. _____

Show the program to your counselor.

Option 4 - **DESIGN a WEB PAGE** for your troop, patrol, school, or place of worship. You need not post the page to a Website, however, if you decided to do so, you will **FIRST** need to get your **PARENT'S PERMISSION**, your **COUNSELORS'S APPROVAL**, and an **OKAY** from the **HOST SITE**.

SHOW the website to your counselor.

Requirement 8

Initials

This requirement asks that you be **FAMILIAR WITH** and **ABLE TO DISCUSS** several terms used in connection with computers. Use the area below to make notes and list terms associated with each category.

Term	Description
Input/Output Devices	
Storage Media	
Memory	
Processors & Coprocessors	
Modems or Network Cards	
Networks	
Electronic Mail	
World Wide Web & Internet	
Wi Fi	

Requirement 9

Initials

A. **WHY** is it **not permissible** to accept a **free copy** of a computer game or program from a friend?

B. **WHAT** are the restrictions and limitations of downloading music from the Internet?

C. **WHY** do **copyright laws** exist?

Requirement 10

Initials

PICK two career opportunities in the computer field that interest you. Find out what education, training, and experience those positions require. Report what you learn to your counselor. **You may begin working on this option prior to the 1st week of the Pow Wow.**

Job: _____

Details: (education, training, experience required, etc.)

Additional Notes:

Attach
Your Leader Signed
Three-Fold Blue Merit Badge
Card To This
Spot

Merit badge worksheets will not be accepted at the Council Office in place of the official Merit Badge Application Card. Those who do not complete all the requirement should take their partially completed merit badge worksheet and their official application card to their local merit badge counselors for completion.