

Principles of Business Information Systems

Hands-on activities – Chapter 3

1. Computer Hardware

When purchasing a computer, you must consider the type of input, data storage, output and processing hardware devices for the computer. Use the Internet, a newspaper advertisement, flyer or visit a computer store to locate a listing for two computers. Use your word processor to create a chart that you will use to compare the capabilities of the two computers. Five suggested capabilities have been entered into the chart. You need to add any other capabilities that you think will be important when making your decision.

Computer Components	Computer 1	Computer 2	Preferred Computer
RAM			
CPU speed			
Monitor size			
Hard drive capacity			

2. Computer Storage Units

Data is stored in memory as a combination of on or off circuit states. Usually 8 bits are used to represent a character, such as the letter A. Eight bits together form a byte (B). In most cases, storage capacity is measured in bytes, with 1 byte equivalent to one character of data. Larger storage units measure data in terms of kilobytes, megabytes, gigabytes, terabytes, petabytes or exabytes. Create a Microsoft Excel or similar spreadsheet to allow a person to enter a number in bytes and convert the number of bytes to exabytes, petabytes, terabytes, gigabytes and megabytes.

Name	Abreviation	Number of bytes
Byte	B	1
Kilobyte	KB	2^{10} or about 1000 bytes
Megabyte	MB	2^{20} or about 1 million bytes
Gigabyte	GB	2^{30} or about 1 billion bytes
Terabyte	TB	2^{40} or about 1 trillion bytes
Petabyte	PB	2^{50} or about 1 quadrillion bytes
Exabyte	EB	2^{60} or about 1 quintillion (a billion billion)

Spreadsheet Example:

Kilobytes	Megabytes	Gigabytes	Terabytes	Petabytes	Exabytes